

CONTRACT FOR ENGINEERING SERVICES

Specified Rate

Indefinite Deliverable with Work Authorizations

THIS CONTRACT FOR ENGINEERING SERVICES (the "Contract") is made and entered into effective as of the __ day of _____, 2015 (the "Effective Date"), by and between the CAMINO REAL REGIONAL MOBILITY AUTHORITY (the "CRRMA"), and Dannenbaum Engineering Company – El Paso, LLC., having its principal business address at 10737 Gateway Blvd West Ste. 112, El Paso, TX79935, (the "Engineer") (collectively, the "Parties"), for the purposes described herein.

WITNESSETH

WHEREAS, Government Code, Chapter 2254, Subchapter A, "Professional Services Procurement Act," provides for the procurement of engineering services; and

WHEREAS, the CRRMA Policy for Procurement of Goods and Services establishes the CRRMA's policies and procedures for the procurement of professional services; and,

WHEREAS, the CRRMA issued a Request for Proposals for Indefinite Deliverable Contracts (the "RFP") dated February 2, 2015; and

WHEREAS, the CRRMA desires to contract for engineering services; and,

WHEREAS, the CRRMA has selected the Engineer to provide the needed services and the Engineer has agreed to provide the services subject to the terms and conditions hereinafter set forth.

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

ARTICLE 1. SCOPE OF SERVICES.

The CRRMA and the Engineer will furnish items and perform those services for fulfillment of this Contract as identified in Attachment B, Services to be Provided by the CRRMA and Attachment C, Services to be Provided by the Engineer. All services provided by the Engineer will conform to standard engineering practices and applicable rules and regulations of the Texas Engineering Practices Act and the rules of the Texas Board of Professional Engineers.

ARTICLE 2. CONTRACT PERIOD.

This Contract becomes effective on the Effective Date provided above and it shall terminate 3 years from the Effective Date (the "Contract Period") unless the Contract Period is: (1) extended due to a work suspension as provided for in Attachment A, General Provisions, Article 3, Paragraph C; or (2) otherwise terminated in accordance with Attachment A, General Provisions, Article 14, Termination. Any work performed or cost incurred before or after the Contract Period shall be ineligible for reimbursement.

The maximum contract time is the time needed to complete all work authorizations that will be issued in the first three years of this Contract. All work authorizations must be issued within the initial three-year period, starting from the Effective Date.

ARTICLE 3. COMPENSATION.

A. Maximum Amount Payable. The maximum amount payable under this Contract without modification is shown in Attachment E, Fee Schedule.

B. Basis of Payment. The basis of payment is identified in Attachment E, Fee Schedule. Reimbursement of costs incurred under a work authorization shall be in accordance with Attachment E, Fee Schedule.

C. Reimbursement of Eligible Costs. To be eligible for reimbursement, the Engineer's costs must (1) be incurred in accordance with the terms of a valid work authorization; (2) be in accordance with Attachment E, Fee Schedule; and (3) comply with cost principles set forth at 48 CFR Part 31, Federal Acquisition Regulation (FAR 31). Satisfactory progress of work shall be maintained as a condition of payment.

D. Engineer Payment of Subproviders. No later than ten (10) days after receiving payment from the CRRMA, the Engineer shall pay all subproviders for work performed under a subcontract authorized hereunder. The CRRMA may withhold all payments that have or may become due if the Engineer fails to comply with the ten-day payment requirement. The CRRMA may also suspend the work under this Contract or any work authorization until subproviders are paid. This requirement also applies to all lower tier subproviders, and this provision must be incorporated into all subcontracts.

ARTICLE 4. PAYMENT REQUIREMENTS

A. Monthly Billing Statements. The Engineer shall request reimbursement of costs incurred by submitting the original and one copy of an itemized billing statement in a form acceptable to the CRRMA. The Engineer is authorized to submit requests for reimbursement no more frequently than monthly and no later than ninety (90) days after costs are incurred.

B. Billing Statement. The billing statement shall show the work authorization number for each work authorization included in the billing, the total amount earned to the date of submission, and the amount due and payable as of the date of the current billing statement for each work authorization. The billing statement shall indicate if the work has been completed or if the billing is for partial completion of the work. The fixed fee will be paid in proportion to the percentage of work completed per work authorizations.

C. Overhead Rates. The Engineer shall use the overhead rate indicated in Attachment E. If a periodic escalation of the overhead rate is specified in Attachment E, the effective date of the revised overhead rate must be included. For lump sum contracts, the overhead rate remains unchanged for the entire Contract Period.

D. Sixty Day Payments. Upon receipt of a billing statement that complies with all invoice requirements set forth in this Article, the CRRMA shall make a good faith effort to pay the amount which is due and payable within sixty (60) days.

E. Withholding Payments. The CRRMA reserves the right to withhold payment of the Engineer's billing statement in the event of any of the following: (1) If a dispute over the work or costs thereof is not resolved within a thirty day period; or (2) pending verification of satisfactory work performed. In the event that payment is withheld, the CRRMA shall notify the Engineer and give a remedy that would allow the CRRMA to release the payment.

F. Required Reports.

(1) The Engineer shall submit monthly Progress Assessment Reports to report actual payments made to Disadvantaged Business Enterprises. One (1) copy shall be submitted with each billing statement to the CRRMA.

(2) Prior to Contract closeout, the Engineer shall submit a Final Report to the CRRMA, in a form approved by the CRRMA.

(3) The Engineer shall submit a separate report with each billing statement showing the percent completion of the work accomplished during the billing period and the percent completion to date, and any additional written report requested by the CRRMA to document the progress of the work.

G. Audit. The CRRMA shall have the exclusive right to examine the books and records of the Engineer as they may relate to the services contemplated by this Contract. The Engineer shall maintain all books, documents, papers, accounting records and other evidence pertaining to this Contract 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 CRRMA or any of its duly authorized representatives, the Texas Department of Transportation (“TxDOT”), Federal Highway Administration (“FHWA”), the United States Department of Transportation (“US DOT”) Office of Inspector General (“OIG”), 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 5. WORK AUTHORIZATIONS.

The CRRMA will issue work authorizations using the form included in Attachment D (Work Authorizations and Supplemental Work Authorizations) to authorize all work under this Contract. The Engineer must sign and return a work authorization within seven (7) working days after receipt. Refusal to accept a work authorization may be grounds for termination of this Contract. The CRRMA shall not be responsible for actions by the Engineer or any costs incurred by the Engineer relating to work not directly associated with or prior to the execution of a work authorization. Terms and conditions governing the use of work authorizations are set forth in Attachment A, General Provisions, Article 1.

ARTICLE 6. 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 to enter into this Contract on behalf of the firm. These representations and warranties are made for the purpose of inducing the CRRMA to enter into this Contract.

ARTICLE 7. NOTICES

All notices to either party by the other required under this agreement shall be delivered personally or sent by certified or U.S. mail, postage prepaid, addressed to such party at the following addresses:

<p style="text-align: center;">Engineer:</p> <p style="text-align: center;">Dannenbaum Engineering Company – El Paso, LLC. 10737 Gateway Blvd West, Ste. 112 El Paso, TX79935</p>	<p style="text-align: center;">CRRMA:</p> <p style="text-align: center;">300 N. Campbell, 2nd Floor El Paso, Texas 79901 Attn: Executive Director</p>
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All notices shall be deemed given on the date so delivered or so deposited in the mail, unless otherwise provided herein. Either party may change the above address by sending written notice of the change to the other party. Either party may request in writing that such notices shall be delivered personally or by certified U.S. mail and such request shall be honored and carried out by the other party.

ARTICLE 8. INCORPORATION OF PROVISIONS.

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

ARTICLE 9. ENTIRETY OF AGREEMENT

This writing, including Attachments and addenda, if any, embodies the entire Contract 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.

IN WITNESS WHEREOF, the **CRRMA** and the **Engineer** have executed this Contract as of the date first above written.

CAMINO REAL REGIONAL MOBILITY AUTHORITY:

By: _____
Raymond Telles
Executive Director

ENGINEER:

By: _____
Louis H. Jones, Jr., P.E.

**Attachments to Contract for Engineering Services
Incorporated into the Contract by Reference**

Attachments	Title
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C	Services to Be Provided by the Engineer
D-1	Work Authorization
D-2	Supplemental Work Authorization
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ATTACHMENT A
GENERAL PROVISIONS
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5	Public Information
6	Personnel, Equipment and Material
7	Subcontracting
8	Inspection of Work
9	Submission of Reports
10	Violation of Contract Terms
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13	Indemnification
14	Engineer's Responsibility
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16	Insurance
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ATTACHMENT A

GENERAL PROVISIONS

ARTICLE 1. WORK AUTHORIZATIONS

A. Use. The Engineer shall not begin any work until the CRRMA and the Engineer have signed a work authorization. Costs incurred by the Engineer before a work authorization is fully executed or after the completion date specified in the work authorization are not eligible for reimbursement. All work must be completed on or before the completion date specified in the work authorization, and no work authorization completion date shall extend beyond the Contract Period set forth in Article 2 of the Contract.

The maximum contract time is the time needed to complete all work authorizations that will be issued in the first three years of the Contract. All work authorizations must be issued within the initial three-year period, starting from the Effective Date.

B. Contents. Each work authorization will specify (1) the types of services to be performed; (2) a period of performance with a beginning and ending date; (3) a full description of the work to be performed; (4) a work schedule with milestones; (5) a cost not to exceed amount, (6) the basis of payment whether cost plus fixed fee, unit cost, lump sum, or specified rate; and (7) a work authorization budget calculated using fees set forth in Attachment E, Fee Schedule. The Engineer is not to include additional contract terms and conditions in the work authorization. In the event of any conflicting terms and conditions between the work authorization and the Contract, the terms and conditions of the Contract shall prevail and govern the work and costs incurred.

C. Work Authorization Budget. A work authorization budget shall set forth in detail (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 at the hourly rates established in Attachment E, Fee Schedule; (3) a work plan that includes a list of the work to be performed, (4) a stated maximum number of calendar days to complete the work, and (5) a cost-not-to-exceed-amount or unit or lump sum cost and the total cost or price of the work authorization. The CRRMA will not pay items of cost that are not included in or rates that exceed those approved in Attachment E.

D. No Guaranteed Work. Work authorizations are issued at the discretion of the CRRMA. While it is the CRRMA'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 CRRMA's or the Engineer's responsibilities and obligations established in the Contract. The Engineer shall promptly notify the CRRMA of any event that will affect completion of the work authorization.

F. Supplemental Work Authorizations. Before additional work may be performed or additional costs incurred, a change in a work authorization shall be enacted by a written supplemental work authorization in the form identified and attached hereto as Attachment D. Both Parties must execute a supplemental work authorization within the period of performance specified in the work authorization. The CRRMA shall not be responsible for actions by the Engineer or any costs incurred by the Engineer relating to additional work not directly associated with the performance or prior to the execution of the supplemental work authorization. The Engineer shall allow adequate time for review and approval of the supplemental work authorization by the CRRMA prior to expiration of the work authorization.

Any supplemental work authorization must be executed by both Parties within the time period established in Article 2 of the Contract.

F-1. More Time Needed. If the Engineer determines or reasonably anticipates that the work authorized in a work authorization cannot be completed before the specified completion date, the Engineer shall promptly notify the CRRMA. The CRRMA may, at its sole discretion, extend the work authorization period by execution of a supplemental work authorization, using the form attached hereto as Attachment D.

F-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. The Engineer must allow adequate time for the CRRMA to review and approve any request for a time extension prior to expiration of the 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 CRRMA's approval.

G. New Work Authorization. If the Engineer does not complete the services authorized in a work authorization before the specified completion date and has not requested a supplemental work authorization, the work authorization shall terminate on the completion date. At the sole discretion of the CRRMA, it may issue a new work authorization to the Engineer for the incomplete work using the unexpended balance of the preceding work authorization for the project. If approved by the CRRMA, the Engineer may calculate any additional cost for the incomplete work using the rates set forth in the preceding work authorization and in accordance with Attachment E, Fee Schedule.

H. Emergency Work Authorizations. The CRRMA, at its sole discretion, may accept the Engineer's signature on a faxed or electronically transmitted copy of the work authorization as satisfying the requirements for executing the work authorization, provided that the signed original is received by the CRRMA within five business days from the date on the faxed or electronically transmitted copy.

I. Deliverables. Upon satisfactory completion of the work authorization, the Engineer shall submit the deliverables as specified in the executed work authorization to the CRRMA for review and acceptance.

ARTICLE 2. PROGRESS

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

B. Conferences. At the request of the CRRMA or the Engineer, conferences shall be provided at the Engineer's office, the office of the CRRMA, or at other locations designated by the CRRMA. These conferences shall also include evaluation of the Engineer's services and work when requested by the CRRMA.

C. Inspections. If state and/or federal funds are used to reimburse costs incurred under the Contract, the work and all reimbursements will be subject to periodic review by TxDOT and/or USDOT.

D. Reports. The Engineer shall promptly advise the CRRMA 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 statement of the action taken or contemplated, and any CRRMA assistance needed to resolve the situation; and

2. favorable developments or events which enable meeting the work schedule goals sooner than anticipated.

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

ARTICLE 3. SUSPENSION OF WORK AUTHORIZATION

A. Notice. Should the CRRMA desire to suspend a work authorization but not terminate the Contract, the CRRMA may verbally notify the Engineer followed by written confirmation, giving (30) thirty days notice. Both Parties may waive the thirty-day notice in writing.

B. Reinstatement. A work authorization may be reinstated and resumed in full force and effect within sixty (60) business days of receipt of written notice from the CRRMA to resume the work. Both Parties may waive the sixty-day notice in writing.

C. Contract Period Not Affected. If the CRRMA suspends a work authorization, the Contract Period as determined in Article 2 of the Contract is not affected and the Contract and the work authorization will terminate on the date specified unless the Contract or work authorization is amended to authorize additional time.

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

ARTICLE 4. OWNERSHIP OF DATA

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

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

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

ARTICLE 5. PUBLIC INFORMATION

The CRRMA will comply with Government Code, Chapter 552, the Public Information Act ("PIA"), and

43 Texas Administrative Code §3.10 et seq. in the release of information produced under the Contract. The CRRMA will use reasonable efforts to notify the Engineer if a request for public information is received which may require the CRRMA to disclose any portion of the information provided by the Engineer or any other material that the Engineer has clearly marked as proprietary, confidential, or otherwise exempt from disclosure under the PIA so as to allow the Engineer the opportunity to protect such materials from public disclosure. The CRRMA is not obligated to assert or argue on behalf of the Engineer that any information provided to the CRRMA is exempt from required disclosure and shall not be liable for the disclosure of any information submitted by the Engineer.

ARTICLE 6. 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 the Contract, or it will be able to obtain such personnel from sources other than the CRRMA.

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

C. Replacement of Key Personnel. The Engineer must notify the CRRMA in writing as soon as possible, but no later than three business days after a project manager or other key personnel, as designated in Attachment F, Organization Chart, is removed from association with the Contract, giving the reason for removal.

D. CRRMA Approval of Replacement Personnel. The Engineer may not replace the project manager or key personnel, as designated in Attachment F, Organization Chart, without prior consent of the CRRMA. The CRRMA must be satisfied that the new project manager or other key personnel is qualified to provide the authorized services. If the CRRMA determines that the new project manager or key personnel is not acceptable, the Engineer may not use that person in that capacity and shall replace him or her with one satisfactory to the CRRMA within forty-five (45) days.

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

ARTICLE 7. SUBCONTRACTING

A. Prior Approval. The Engineer shall not assign, subcontract or transfer any portion of professional services related to the work under the Contract without prior written approval from the CRRMA.

B. DBE Compliance. The Engineer's subcontracting program shall comply with Article 18, DBE requirements.

C. Required Provisions. All subcontracts for professional services shall include the provisions included in

this Attachment A, General Provisions, and any provisions required by law. The Engineer is authorized to pay subproviders in accordance with the terms of the subcontract, and the basis of payment may differ from the basis of payment by the CRRMA to the Engineer.

D. Prior Review. Subcontracts for professional services in excess of \$25,000 shall be reviewed by the CRRMA prior to performance of work thereunder.

E. Engineer Responsibilities. No subcontract relieves the Engineer of any responsibilities under the Contract.

ARTICLE 8. INSPECTION OF WORK

A. Review Rights. The CRRMA, TxDOT and/or the USDOT, when state and/or federal funds are involved, and any of their authorized representatives 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 subprovider, the Engineer shall provide and require its subproviders to provide all reasonable facilities and assistance for the safety and convenience of the state or federal representatives in the performance of their duties.

ARTICLE 9. SUBMISSION OF REPORTS

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

ARTICLE 10. 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 CRRMA arising from the Engineer's default, breach of Contract or violation of Contract terms shall be paid by the Engineer.

B. Remedies. This agreement 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.

ARTICLE 11. TERMINATION

A. Causes. 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 CRRMA 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;
3. By either party, upon the failure of the other party to fulfill its obligations as set forth herein, following thirty (30) day written notice and opportunity to cure;
4. By the CRRMA for reasons of its own, not subject to the mutual consent of the Engineer, by giving thirty (30) business days' notice of termination in writing to the Engineer;

5. By the CRRMA, if the Engineer violates the provisions of Article 17, Gratuities, or Article 18, Disadvantaged Business Enterprise Requirements; or
6. By satisfactory completion of all services and obligations described herein.

B. Measurement. Should the CRRMA terminate the Contract as herein provided, no fees other than undisputed 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 CRRMA 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 CRRMA terminate the Contract under paragraph (4) or (5) above, the Engineer shall not incur costs during the thirty-day notice period.

C. Value of Completed Work. If the Engineer defaults in the performance of the Contract or if the CRRMA terminates the Contract for fault on the part of the Engineer, the CRRMA 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 Attachment E, Fee Schedule) 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 CRRMA; (4) the cost to the CRRMA of employing another firm to complete the required work; (5) the time required to employ another firm to complete the work; and (6) other factors which affect the value to the CRRMA of the work performed.

D. Calculation of Payments. The CRRMA shall use the fee schedule set forth in Attachment E, Fee Schedule in determining the value of the work performed up to the time of termination. In the case of partially completed engineering services, eligible costs will be calculated as set forth in Attachment E, Fee Schedule. The sum of the overhead percentage rate for payroll additives and for general and administrative overhead costs during the years in which work was performed shall be used to calculate partial payments. 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 the Contract and payment of an amount in settlement as prescribed above shall extinguish the rights, duties, and obligations of the CRRMA and the Engineer under the Contract, except for those provisions that establish responsibilities that extend beyond the Contract Period.

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

ARTICLE 12. 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 the Contract, including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, nondiscrimination, and licensing laws and regulations. When required, the Engineer shall furnish the CRRMA with satisfactory proof of its compliance therewith.

ARTICLE 13. INDEMNIFICATION

THE ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS THE CRRMA AND ITS OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS FROM ANY CLAIMS, COSTS OR

LIABILITIES OF ANY TYPE OR NATURE AND BY OR TO ANY PERSONS WHOMSOEVER, TO THE EXTENT CAUSED BY THE ENGINEER'S NEGLIGENT ACTS, ERRORS OR OMISSIONS 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 CRRMA, ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS FROM ANY AND ALL REASONABLE AND NECESSARY EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES INCURRED BY THE CRRMA IN LITIGATING OR OTHERWISE RESISTING SAID CLAIMS, COSTS OR LIABILITIES. IN THE EVENT THE CRRMA, ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS, IS/ARE FOUND TO BE PARTIALLY AT FAULT, THE ENGINEER SHALL, NEVERTHELESS, INDEMNIFY THE CRRMA FROM AND AGAINST THE PERCENTAGE OF FAULT ATTRIBUTABLE TO THE ENGINEER, ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS, OR TO THEIR CONDUCT.

ARTICLE 14. ENGINEER'S RESPONSIBILITY

A. Accuracy. The Engineer shall be responsible for the accuracy of work and shall promptly make necessary revisions or corrections resulting from its errors, omissions, or negligent acts without compensation.

B. Errors and Omissions. The Engineer's responsibility for all questions arising from design errors or omissions will be determined by the CRRMA. The Engineer will not be relieved of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities until after the construction phase of the project has been completed.

C. Seal. The responsible Engineer shall sign, seal and date all appropriate engineering submissions to the CRRMA 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 CRRMA, the CRRMA, as the owner, will notify the party to the Contract, in writing, of the possibility that a CRRMA 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 15. NON-COLLUSION

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 the 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 the Contract.

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

ARTICLE 16. INSURANCE

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

A. Workers' Compensation Insurance. In accordance with the laws of the State of Texas, Engineer shall maintain employer's liability coverage with a limit of not less than \$500,000.

B. Comprehensive General Liability Insurance or Commercial General Liability Insurance. If coverages are specified separately, they must be at least these amounts:

Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
	\$2,000,000 for aggregates

Manufacturers' or Contractor Liability Insurance is not an acceptable substitute for Comprehensive General Liability Insurance or Commercial General Liability Insurance.

C. Professional Liability Insurance. Engineer shall provide and maintain professional liability coverage, with limits not less than \$3,000,000 per claim and \$3,000,000 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 subcontractors and subconsultants (including, but not limited to design subcontractors and subconsultants) of any tier.

D. Comprehensive Automobile Liability Insurance. Applying to owned, nonowned, 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.

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 the Contract in the event of their loss or destruction, until such time as the work has been delivered to the CRRMA.

F. General Insurance Requirements. For all insurance required by this Article 16, certificates of insurance 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 must be written through companies licensed to transact that class of insurance in the State of Texas and acceptable to the CRRMA.

Such insurance shall be maintained in full force and effect during the life of the Contract or for a longer term as may be otherwise provided for hereunder. Insurance furnished under Sections B and D, above, shall name the CRRMA and the Engineer as additional insureds and shall protect the CRRMA, the Engineer, their officers, employees, 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

wrongful acts or failures to act by the Engineer, its officers, employees, directors, subconsultants, agents, and representatives in the performance of the services rendered under the Contract.

The insurance carrier shall include in each of the insurance policies 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 CRRMA, at the address provided in the Contract."

ARTICLE 17. GRATUITIES

A. Employees Not to Benefit. CRRMA policy mandates that employees of the CRRMA shall not accept any benefit, gift or favor from any person doing business with or who reasonably speaking may do business with the CRRMA under the Contract. Employees may accept meals offered in the course of normal business relationships and promotional items that do not exceed an estimated \$25 in value and are distributed as a normal means of business advertising.

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

ARTICLE 18. DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

The Engineer agrees to comply with the assigned Disadvantaged Business Enterprise goal or a zero goal, as determined by the CRRMA.

ARTICLE 19. CIVIL RIGHTS COMPLIANCE

A. Compliance with Regulations. The Engineer shall comply with the regulations of the USDOT, Title 49, Code of Federal Regulations, Parts 21, 25, 27 and 28 as they relate to nondiscrimination; also Executive Order 11246 titled Equal Employment Opportunity as amended by Executive Order 11375 (the "Regulations").

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 subcontractors, 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 subcontractor or supplier shall be notified by the Engineer of the Engineer's obligations under the 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 CRRMA 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 CRRMA, TxDOT 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 the Contract, the CRRMA shall impose such contract sanctions as it, TxDOT, or the FHWA may determine to be appropriate, including, but not limited to:

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

F. Incorporation of Provisions. The Engineer shall include the provisions of paragraphs (A) through (E) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Engineer shall take such action with respect to any subcontract or procurement as the CRRMA, TxDOT, or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance provided, however, that in the event an Engineer becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Engineer may request the CRRMA to enter into such litigation to protect the interests of the CRRMA; and, in addition, the Engineer may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE 20. PATENT RIGHTS

The CRRMA and the USDOT shall have the royalty free, nonexclusive and irrevocable right to use and to authorize others to use any patents developed by the Engineer under the Contract.

ARTICLE 21. COMPUTER GRAPHICS FILES

The Engineer agrees to comply with TxDOT's Computer-Aided Design (CAD) Manual, if determined by the CRRMA to be applicable to the Contract.

ARTICLE 22. DISPUTES

A. Disputes Between the Parties. Any dispute between the parties as to the interpretation of, subject matter of, or in any way related to the Contract, including a dispute concerning the cost of services, is to be resolved by the two parties attempting to reach a fair and equitable resolution by using good faith negotiation followed by, if necessary, one or more of the following means: (1) mediation; (2) arbitration; and/or (3) legal proceedings in a court of competent jurisdiction. Resolution of any claims, questions, or disputed amounts shall be subject to approval by the CRRMA Board of Directors.

B. 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 or any contract with a subconsultant in support of the services authorized herein.

ARTICLE 23. SUCCESSORS AND ASSIGNS

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

ARTICLE 24. SEVERABILITY

In the event any one or more of the provisions contained in the 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 the Contract shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

ARTICLE 25. PRIOR CONTRACTS SUPERSEDED

This Contract 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 26. CONFLICT OF INTEREST

A. Representation by Engineer. 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 CRRMA or which in any way conflicts with the interests of the CRRMA. The Engineer and its subconsultants shall not enter into any contract with TxDOT, the FHWA, the City of El Paso or other agencies or parties during the term of this Contract which could create a conflict of interest with the services provided to the CRRMA and shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the CRRMA's interests. The Engineer shall at all times comply with the Conflict of Interest Policy adopted by the CRRMA. Questions regarding potential conflicts of interest shall be addressed to the Executive Director for resolution.

B. Environmental Disclosure. The Engineer certifies by executing the Contract that it has no financial or other interest in the outcome of this Project on which the environmental assessment is prepared.

ARTICLE 27. CONTROLLING LAW, VENUE

This Contract shall be governed and construed in accordance with the laws of the State of Texas. The parties hereto acknowledge that venue is proper in El Paso County, Texas, for all disputes.

ATTACHMENT B

SERVICES TO BE PROVIDED BY THE CRRMA

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

1. Authorize the Engineer in writing to proceed.
2. Place at Engineer's disposal all reasonably available information pertinent to the project, including previous reports, drawings, specifications or any other data relative to the project.
3. Designate in writing a person to act as the Authority's representative, such person to have complete authority to transmit instructions, receive information and interpret and define Authority's decisions with respect to the services to be provided by the Engineers.
4. Render decisions and approvals, as soon as reasonably possible to allow for the expeditious performance of the service to be provided by the Engineer.

ATTACHMENT C

SERVICES TO BE PROVIDED BY THE ENGINEER

I. PROJECT SUMMARY

Professional Services will be provided by the Engineer to produce preliminary plan documents and final plans, specifications, and estimates (PS&E) for projects identified in the 2013 County Mobility Plan of the El Paso Metropolitan Planning Organization or as identified by the CRRMA. These services generally will include topographic surveying, pavement design, development of roadway geometry, drainage, traffic, right-of-way mapping, geotechnical, stakeholder coordination, document preparation, illumination, landscaping and design services necessary for the preparation of PS&E. Coordination with the various municipalities, developers, and all utilities is required. The Engineer will also be required to prepare a complete bid package, participate during the bid phase (respond to any questions received by prospective bidders and attend a pre-bid conference).

II. SERVICES TO BE PROVIDED BY THE ENGINEER

The Engineer will conform to the latest editions of the TxDOT Project Development Process Manual, the Roadway Design Manual, the PS&E Preparation Manual, and other applicable codes, ordinances, criteria, standards, regulations, policies, guidelines, practices and procedures.

The Engineer will work at the direction and supervision of the CRRMA Executive Director and its consultants, providing reports and findings, as required. The Engineer will work cooperatively and collaboratively with other governmental agencies and design consultant firms who are responsible for adjacent projects or jurisdictional improvements. Scheduling of activities below will conform to established CRRMA, County of El Paso and/or other municipal review and comment periods for each deliverable of the project.

The Scope of Services to be provided by the Engineer may include, but are not limited to the following key elements:

- Project Management
- Surveying
- Right-of-Way Mapping
- Geotechnical Investigations
- Schematic Design
- Drainage study
- Public/Stakeholder coordination
- Environmental
- Plans, Specifications and Estimates
- Utility Coordination

A. Project Management

The Engineer, in coordination with the CRRMA, will be responsible for directing and coordinating all activities related to the Project. Project management and administration tasks shall include a Project Management/Work Plan, Progress Reporting, Coordination/Administration, Project Control/Scheduling, and Subconsultant Management. The prime provider's efforts shall include but not limited to the following:

1. Project Management/Work Plan

1.1 Develop a Project Management/Work Plan to reflect the following:

- organization and responsibilities
- coordination and communication procedures
- coordination meetings
- deliverables
- graphic production standards
- quality control (QC) procedures/plan to ensure the accuracy and quality of the deliverables produced
- other important operational information pertaining to prime provider/CRRMA collaboration.
- A plan to meet the DBE goal of 10%

2. Progress Reporting

2.1 Prepare and submit to the CRRMA monthly progress reports of activities completed during reporting period.

2.1.1 Activities Completed

2.1.2 Initiated and Ongoing Activities

2.1.3 Planned Activities

2.1.4 Problems Encountered/Problem Remedies

2.1.5 Overall Status including Tabulation of Percentage Complete by Task

2.1.6 Updated Project Schedule

2.2 Prepare and Submit Invoices. The report shall be submitted as an attachment to the invoice submittal.

2.2.1 Financial and DBE Participation

2.2.2 Hours Worked by Individual

2.2.3 Hourly Rate

2.2.4 Monthly Invoice Amount as Compared to Baseline Monthly Estimate

2.2.5 Monthly Cumulative Invoice Amount as Compared to Baseline Monthly Cumulative Estimate

2.2.6 Reasons for Deviations from Baseline

3. Coordination/Administration

3.1 The Engineer shall prepare for and attend one kick-off meeting to discuss project guidelines and present general project requirements and expectations.

3.2 Maintain a communication tracking system, identifying all formal communications.

- 3.3 Coordinate with the CRRMA's GEC staff regularly throughout project development.
- 3.4 Compile and maintain a comprehensive Administrative Record.
- 4. Project Control/Scheduling
 - 4.1 Develop and maintain a Master Schedule for the Project indicating tasks/subtasks, critical dates, milestones, deliverables, and review requirements.
 - 4.2 Update and Schedule on a Monthly Basis
 - 4.3 Include all CRRMA GEC, TxDOT and other 3rd Party Reviews in the Schedule
- 5. Subconsultant Management
 - 5.1 Develop and implement a plan to manage subconsultants (as part of the project management plan).
 - 5.2 Prepare subcontracts for subconsultant(s).
 - 5.3 Monitor subconsultant activities (staff and schedule).
 - 5.4 Review and recommend approval of subconsultant progress reports and invoices.

Deliverables

- Project Management Plan
- Summaries of all meetings
- Administrative Record
- Project Schedule and monthly updates
- Subconsultant Contracts, Progress Reports and Invoices

B. Surveying

All surveying shall comply with the Professional Land Surveying Practices Act, Article 5282c, Vernon's Texas Civil Statutes. All surveying shall comply with applicable rules promulgated by the Texas Board of Professional Land Surveying. The Manual of Practice published by the Society of Professional Surveyors shall be used as a guide in determining accuracy requirements and procedures to follow. The prime provider's field surveying efforts shall include the following:

- 1. Project Control
 - 1.1 Establish primary and secondary control monuments. The horizontal and vertical datum for the existing control monuments will be as follows:
 - Horizontal – Texas State Plane Coordinate System of 1983(NAD-83 State Plane Coordinates)
 - Vertical – NAVD 88, GEOID 2012A.
- 2. Aerial Mapping
 - 2.1 LiDAR mapping will include all visible surface appurtenances included in the State's current Photogrammetric Mapping Legend symbology, and level structure shall be in compliance with the State's current Photogrammetric Mapping Legend for 1 inch = 50feet scale mapping.
 - 2.2 DTM breakline and mass point data will be collected from the LiDAR data and will be suitable for producing 1-foot contours.

2.3 In areas where the ground is not visible due to tree canopy or dense vegetation ground cover, the area will be outlined and defined as obscured.

3. Ground Survey

2.1 The Engineer will provide a boundary and topographic improvements survey of the entire roadway corridor. Survey information beyond/outside the ROW will require permission from the impacted property Owner(s). Requests for access from private property owner(s) and surveys in private property will be the responsibility of the Engineer.

2.2 Perform any ditch/channel cross-sections at 25-foot intervals along and perpendicular to the ditch/channel centerline for a distance of 100 feet left and right of the existing right-of-way (ROW) .

2.3 Survey the horizontal location of visible aboveground utility appurtenances within the existing ROW.

2.4 Survey the horizontal and vertical location of the existing roadway for a distance of 1,000 feet each side of the Project limits.

- A telephone order to Dig Tess will be placed to have the underground utilities marked (painted) on the surface. The survey will include tying these marks.
- The topographic survey will include tying all visible utility features to include the following: water valves; water meters; sanitary sewer manholes; storm sewer manholes; electrical manholes; power poles; light poles; overhead lines; electrical control panels; traffic signals; traffic signs; telephone manholes and pedestals; stem walls; chain link fences; rock walls; trees, etc.
- The survey will also include existing pavement, paint stripes, existing asphalt and concrete driveways, existing concrete sidewalks, ditches, stairs, steps, and existing concrete curb and gutter

4. Aerial Mapping

- LiDAR mapping will include all visible surface appurtenances included in the State's current Photogrammetric Mapping Legend symbology, and level structure shall be in compliance with the State's current Photogrammetric Mapping Legend for 1 inch = 50feet scale mapping.
- DTM breakline and mass point data will be collected from the LiDAR data and will be suitable for producing 1-foot contours.
- In areas where the ground is not visible due to tree canopy or dense vegetation ground cover, the area will be outlined and defined as obscured. Files shall include, as applicable, all features listed on the State's current Photogrammetric Mapping Legend symbology, and level structure shall be in compliance with the State's current Photogrammetric Mapping.

Deliverables

- Final planimetric and topographic base map showing all mapped planimetrics and supplemental field survey data described above.
- Final Triangulated Irregular Network (TIN) file
 - All electronic files shall be fully compatible with the State's MicroStation GeoPak system without further modification or conversion.
 - All MicroStation V8 2D and 3D files will be in U.S. survey feet.

C. Right-of-Way Mapping

1. Perform a right-of-way survey
 - 1.1 Determine existing right-of-way limits
 - 1.2 Determine existing right-of-way limits
 - 1.3 Determine easements
 - 1.4 Determine actual property owners.
2. Acquire permission for Right of Entry As necessary or other written evidence of permission before entering private property.
 - 2.1 Draft ROE form
 - 2.2 Coordination with property owner
3. Prepare right of way map and property description for the project limits.
 - 3.1 Prepare ROW map sheets
 - 3.2 Prepare property description

Deliverables

- Complete right of way map and property descriptions throughout project corridor.

D. Geotechnical Investigations

1. Subsurface Exploration and Testing
 - 1.1 Perform a geotechnical engineering investigation at the site of the project.
 - 1.1.1 Conduct subsurface explorations and provide information needed for the design of a cost effective pavement structural section for the proposed roadway improvements.
 - Contact utility one call services to mark all existing utilities in the project corridor prior to starting work activities.
 - 1.1.2 Implement traffic control as required to accomplish the exploratory drilling. Prepare and submit to the County for review and approval, necessary traffic control plans and permit forms.
 - 1.1.3 Advance one exploratory boring at maximum intervals of 500 lineal feet of roadway alignment to a minimum depth of 15 feet. At ponding area sites, perform a minimum of two exploratory borings at each site, extending to a minimum depth of 20 feet below the anticipated depth of pond.
 - 1.1.4 Perform split spoon standard penetration tests (SPT) at 2.5 feet below grade and 5 feet thereafter.
 - 1.1.5 Develop a laboratory soils testing program to perform moisture content (ASTM D 2216), dry unit weight (ASTM D 2937), percent passing the No. 200 sieve (ASTM D 1140), Atterburg limits determination (ASTM D 4318) and sieve analysis (ASTM D 6913) for each major soil type encountered. Utilize the index test to classify the recovered soils in accordance with the Unified Soils Classification System.
 - 1.1.6 Derive soil strength utilizing the split spoon SPT blow counts or unconfined compressive strength tests (ASTM D 2166) on selected soils.
 - 1.1.7 Perform a California Bearing Test (CBR) (ASTM D 1883) for each

major soils type.

1.1.8 Perform a minimum of two percolation tests at each ponding area site at the anticipated depth of pond.

2. Geotechnical Design

2.1 Perform an engineering evaluation in general accordance with the AASHTO pavement design guide to determine pavement base and pavement thickness for a rigid pavement concrete section.

2.2 Provide recommendations for underground storm water pipe bedding and backfill.

2.3 Provide recommendations for illumination pole foundations, traffic signal mast arm foundations, and retaining wall structures.

2.4 Summarize results of the geotechnical engineering investigations in a written report.

Deliverables

- Provide three (3) PE sealed and signed copies of report.

E. Schematic Design

The Engineer will develop the Design Schematic to include, but not be limited to, the following items:

1. Data Collection

1.1 Photographic Record

1.1.1 Collect relevant data along the corridor

1.1.2 Document any Landmarks Along Existing Corridor

1.2 Collect Utility/ROW Data

1.2.1 Acquire all Existing Above and Below Ground Utility Plans and Documents (Public and Private)

1.2.2 Acquire Listing of Utility Companies to be contacted, and other pertinent information

2. Submit design criteria to be used in the design of the Project for approval by CRRMA prior to beginning schematic design work.

3. Design Schematic. The Design Schematic shall show, as a minimum:

3.1 Typical sections

3.2 Lane Lines and Arrows Indicating Number of Lanes

3.3 ROW limits:

- Provide design cross-sections to verify ROW requirements
- Show existing and proposed ROW limits
- Show existing (if any) and proposed easements
- Show the proposed toe of slope

3.4 New Bridge(s) Limits

3.5 Retaining Wall(s) Limits

3.6 Geometrics

3.7 Utility Conflicts/Adjustments (Location and Elevation Information)

3.8 Existing and Proposed Drainage Structures

4. Develop Engineer's cost estimate to include construction, ROW, utility relocations, and contingencies.

Deliverables

- Design Summary Report
- Preliminary (30, and 60 percent) Design Schematic
- Cost estimate

F. Drainage Study

1. Perform a drainage study of the project watershed
 1. Determine the drainage requirements for the project.
 1. The study will consider the location of retention ponding areas for storing runoff from the project. The study will be documented in a bound Drainage Study report signed and sealed by a Registered Professional Engineer in the State of Texas .
 2. The study will identify any right of way requirements for locating and constructing new ponding areas and/or other drainage appurtenances required for the project..
2. Coordinate with the County, TxDOT, and adjoining developers to check that all proposed drainage systems accommodate the proposed construction.
3. Design services will include the following:
 1. Prepare drainage area maps.
 2. Prepare culvert plan and elevation sheets.
 3. Prepare plan/profile sheets for storm drain systems and outfall ditches.
 4. Select standard details from County or TxDOT list of standards for items such as inlets, manholes, junction boxes and end treatment, etc.
 5. Prepare details for non-standard inlets, manholes and junction boxes.
 6. Prepare drainage details for outlet protection, outlet structures and utility accommodation structures.
 7. Identify pipe strength requirements.
 8. Prepare drainage facility quantity summaries.
 9. Identify potential utility conflicts and design around them, wherever possible.
 10. Take into consideration drainage impacts to pedestrian facilities, utilities, driveways, retaining walls and concrete traffic barriers.
 11. If applicable, prepare Hydraulic Data Sheets for any bridge or cross drainage structures at outfall channel. (Indicate site location such as name of creeks and stations)
 12. Develop plans for all temporary drainage facilities necessary to allow staged construction of the project and to conform with the phasing of adjacent construction projects without significant impact to the hydraulic capacity of the area.
 - Prepare design layouts, drainage area maps, and design of all drainage components. The Engineer shall design all

conventional storm drainage and cross drainage in conformance with El Paso County design guidelines.

- Storm drain design will be performed using WinStorm or GEOPAK Drainage. Cross drainage design will be performed using WINSTORM, HY 8 or HEC RAS

Deliverables

- Three copies of the bound Drainage Study report.

G. Public/Stakeholder Coordination

1. The Engineer will be responsible for implementing any Public/Stakeholder involvement. Services will include identifying public affected by the project and coordination of meetings to establish a proactive involvement process during the Project development. The Public/Stakeholder involvement activities sought under this scope of services, include, but are not limited to the following:

1. Develop a plan and strategies to engage Public/Stakeholders.
2. Organize and implement meeting logistics.
3. Identify public/stakeholders and develop mailing list database.
4. Develop innovative public involvement tools and techniques.
5. Facilitate meetings.
6. Prepare and distribute involvement material.
7. Produce graphic materials to promote and educate public/stakeholders about the project.
8. Monitor and review comments received.
9. Prepare exhibits/displays for Meetings.
10. Prepare Meeting Summary, including a response to comments received.
11. Develop general advertisements, legal notices, and legal notices of availability for inclusion in local newspapers to inform the public of upcoming meetings/hearing.
12. Provide translation services as required.
13. Prepare exhibits/displays for Public Meetings and Hearing.
14. Prepare Public Meeting Summary and Analysis Report, including a response to comments received.
15. Prepare Public Hearing Summary and Analysis Report, including a response to comments received.

Deliverables

- Stakeholder Involvement Plan
- Stakeholder Mailing List Database
- Meeting Material
- Meeting Summary and Analysis Report
- Newspaper advertisements and/or Legal Notices
- Public Hearing Material
- Public Hearing Summary and Analysis Report

H. Environmental

The consultant team shall be responsible for providing multi-disciplinary environmental services to support the CRRMA's project development efforts. As a part of the environmental studies, the consultant shall conduct agency coordination to aid in the development of the environmental document. The consultant team shall be responsible for preparing the environmental document and all associated technical survey documents. Activities may include, but are not necessarily limited to the following:

1. Data Collection
2. Develop Project Need and Purpose
3. Environmental review and analysis. Conduct environmental studies related to:
 - socioeconomic and environmental justice impacts
 - land use
 - biological resources
 - federally and state listed threatened and endangered species
 - archeological resources
 - historic resources
 - noise impacts
 - air quality impacts
 - Section 4(f) resources
 - hazardous materials
 - indirect and cumulative impacts
 - permit requirements
4. Conduct agency coordination (for inclusion in the environmental document)
5. Prepare environmental document per NEPA, FHWA and TxDOT requirements
6. Coordinate jurisdictional determination for waterways and complete necessary permits

Deliverables

- Archeological Survey Report
- Historic Resources Survey Report
- Section 4(f) Evaluation
- Environmental Assessment

I. Plans, Specifications and Estimates (PS&E)

1. As necessary, update traffic data, right of way maps, and other information from previous projects and other activities.
2. Design Summary Report
 1. Complete the Design Summary Report
 2. Hold a Design Conference at the 30% design stage.
3. Initial design
 1. develop traffic control plan/detour plans
 2. obtain environmental permits
 3. coordinate approval of pavement design
 4. prepare hydrologic/hydraulic reports as necessary
4. Utility Coordination
 1. research and determination of the location of existing utilities

2. minimization of utility conflicts with the proposed design
3. coordination with utilities to develop relocation plans
4. develop Utility Layout Plan
5. develop utility relocation schedule
5. Roadway Design
 1. design final vertical and horizontal alignments
 2. develop cross-section and earthwork volumes
 3. detail design elements throughout project including illumination, driveway access, bicycle and pedestrian facilities, landscape, and miscellaneous details
 4. submit design exceptions/waivers as required on project
6. Operational design
 1. develop signing and pavement marking plans
 2. develop signalization plans
7. Drainage Design
 1. develop retention pond design
 2. prepare retention pond details
 3. develop hydraulic design for culverts and storm drains
 4. prepare culvert and storm drain details
 5. design final vertical and horizontal alignments for storm drains
8. Traffic Control
 1. attend up to two meetings to present and discuss the proposed construction sequence and traffic control plans for the project.
 2. prepare traffic control drawings including: Line Diagrams; Detour Plans; TCP; General Note Guidelines for Contractor to follow; TCP Details/Standards.
 3. compile TCP Details/Standards using available TxDOT Standards.
9. Storm Water Pollution Prevention Plan (SW3P)
 1. Prepare SW3P Narrative
 2. Prepare Storm Water Pollution Prevention Plans
 3. Prepare SW3P Manual (Binder)
10. Final assembly of PS&E Package and supporting documents
 1. complete final construction plans
 2. develop standard and special specifications
 3. develop special provisions
 4. develop cost estimate
 5. develop bid document package
 6. support CCRMA's develop of project agreements related to the Project
11. ADA compliance Services
 1. Engineer will perform plan review and inspections for ADA, T.A.S, and Texas Department of Licensing and Regulation requirements.
12. Bid assistance
 1. assist with bid process and provide answers to prospective bidders
 2. Attend prebid conference

Deliverables

- 30, 60, 90, 100% Submittals: The Engineer will prepare and provide five (5) reproducible copies of the 30,60, 90, 100% Design documents and corresponding electronic (pdf) files
- Specification list
- QC redlines at (30, 60, and 90 percent) design reviews
- Preliminary (30, 60, and 90 percent) design review
- Final hydraulic report
- Final approved design exceptions/waivers
- Plans estimate
- Specification list, general notes, special provisions, specifications, special specifications
- Final signed and sealed construction plans
- Bid document package
- Environmental Permits

J. Utility Coordination

1. conduct a records research and acquisition of available as-built utility records. This information will be placed on the base map and provided to all utility companies.
2. designate known utilities throughout the ROW, as provided by utility owners.
3. conduct utility coordination meetings to review record drawings and proposed improvements with affected utility owners individually at each phase submittal. Utilities that may be affected include: El Paso Electric Company, Texas Gas Service, El Paso Water Utilities, Time Warner Cable, TW Telecom, ATT Telephone, AT&T Distribution Cable, MCI, QWEST Communications, and others.
4. prepare and issue minutes for each meeting.
5. provide base map information to all utility companies at each submittal phase.
6. obtain clearance letters and provide copies of documentation to the CRRMA at the Final submittal phase. Utilities can request that their new service lines be included as part of the bid package provided that the utility company signs an agreement with the CRRMA and funding is provided.

[END OF EXHIBIT]

ATTACHMENT D
D-1

WORK AUTHORIZATION NO. 1
CONTRACT FOR ENGINEERING SERVICES

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 5 of the Contract for Engineering Services (the Contract) entered into by and between the CAMINO REAL REGIONAL MOBILITY AUTHORITY (the "CRRMA"), and _____ (the "Engineer").

PART I. The Engineer will perform engineering services generally described as _____ in accordance with the project description attached hereto and made a part of this Work Authorization. The responsibilities of the CRRMA 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 \$----- and the method of payment is Specified Rate Basis as set forth in Attachment E of the Contract. This amount is based upon fees set forth in Attachment E, Fee Schedule, of the Contract and the Engineer's estimated Work Authorization costs included in Exhibit D, Fee Schedule, which is attached and made a part of this Work Authorization.

PART III. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Articles 3 thru 5 of the Contract, and Attachment A, General Provisions, Article 1.

PART IV. This Work Authorization shall become effective on the date of final acceptance of the Parties hereto and shall terminate upon CRRMA final acceptance of the completed project, unless extended by a supplemental Work Authorization as provided in Attachment A, General Provisions, Article 1.

The maximum contract time is the time needed to complete all work authorizations that will be issued in the first three years of the contract. All work authorizations must be issued within the initial three-year period, starting from the Effective Date.

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.

CAMINO REAL REGIONAL MOBILITY AUTHORITY

By: _____
Executive Director

ENGINEER:

By: _____

LIST OF EXHIBITS

Exhibit A	Services to be provided by the CRRMA
Exhibit B	Services to be provided by the Engineer
Exhibit C	Work Schedule
Exhibit D	Fee Schedule/Budget
Exhibit E	Organization Chart

ATTACHMENT D
D-2

SUPPLEMENTAL WORK AUTHORIZATION NO. ____
WORK AUTHORIZATION NO. ____
CONTRACT FOR ENGINEERING SERVICES

THIS SUPPLEMENTAL WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 5 of the Contract for Engineering Services hereinafter identified as the “Contract,” entered into by and between the CAMINO REAL REGIONAL MOBILITY AUTHORITY (the “CRRMA”), and _____ (the “Engineer”).

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. 1 not hereby amended are to remain in full force and effect.

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

CAMINO REAL REGIONAL MOBILITY AUTHORITY

By: _____
Executive Director

ENGINEER:

By: _____

ATTACHMENT E
FEE SCHEDULE
(Final Cost Proposal)

This attachment provides the basis of payment and fee schedule. **The basis of payment for this contract is indicated by an “X” in the applicable box.** The basis shall be supported by the Final Cost Proposal (FCP) shown below. If more than one basis of payment is used, each one must be supported by a separate FCP.

“X”	Basis	
_____	Lump Sum	The lump sum shall be equal to the maximum amount payable. The lump sum includes all direct and indirect costs and fixed fee. The Engineer shall be paid pro rata based on the percentage of work completed. For payment the Engineer is not required to provide evidence of actual hours worked, travel, overhead rates or other evidence of cost.
_____	Unit Cost	The unit cost(s) for each type of unit and number of units are shown in the FCP. The unit cost includes all direct and indirect costs and fixed fee. The Engineer shall be paid based on the type and number of units fully completed and the respective unit cost. For payment, the Engineer is not required to provide evidence of actual hours worked, travel, overhead rates or any other cost data. The FCP may include special items, such as equipment which are not included in the unit costs. Documentation of these special costs may be required. The maximum amount payable equals the total of all units times their respective unit cost plus any special direct items shown.
<u> X </u>	Specified Rate Basis	The specified rates for each type of labor are shown in the FCP below. The FCP may include special items, such as equipment which are not included in the specified rates. Payment shall be based on the actual hours worked multiplied by the specified rate for each type of labor plus other agreed to special direct cost items. The specified rate includes direct labor and indirect cost and fixed fee. The CRRMA may request documentation of reimbursable direct costs including hours worked. Documentation of special item costs may be required. The specified rate is not subject to audit.
_____	Cost Plus Fixed Fee	<p>Payment shall be based on direct and indirect costs incurred <u>plus</u> a pro rata share of the fixed fee based on the ratio of <u>labor and overhead cost incurred</u> to <u>total estimated labor and overhead cost in the FCP</u> or the percentage of work completed. The invoice must itemize labor rates, hours worked, other direct costs and indirect costs. The Engineer may be required to provide documentation of hours worked and any eligible direct costs claimed. The overhead rate charged is subject to audit and adjustment to actual rates incurred. The FCP below shows the hourly rates for labor, other direct expenses including but not limited to travel and allowable materials, overhead rate and the fixed fee.</p> <p style="margin-left: 40px;">___A. Actual Cost Plus Fixed Fee - Actual wages are paid (no minimum, no maximum. This option does not apply to Indefinite Deliverable Contracts.)</p> <p style="margin-left: 40px;">___B. Range of Cost Plus Fixed Fee – Actual wages <u>must</u> be within the allowable range shown on the Final Cost Proposal.</p>

ATTACHMENT E
FEE SCHEDULE

Final Cost Proposal (FCP) Supporting Basis of Payment

* Maximum amount payable must be negotiated for each work authorization.

The maximum amount payable is based on the following data and calculations:

ATTACHMENT E -1 Invoice Reimbursement Checklist

Direct Labor/Timesheets: The invoice must clearly identify each employee name, title, hours worked, date of performance, task or project description, rate per hour and/or cost, and office/company location.

Transportation Costs and Reimbursable Limits: Efforts must be made to secure a *reasonable* and/or lowest rate available in the marketplace.

Airline Costs: Authority will only reimburse for airline costs at the Economy or Coach Class rate. Extra insurance and luggage costs are unallowable. Airline ticket “reissue fee” is reimbursable only if the change was at Authority’s request or change in meeting because of Authority.

Personal Automobile Mileage: Up to the state approved rate of **57.5 cents** per mile or the current state rate applicable at the time cost is incurred. Expense report must clearly identify the departure/arrival time, To/From destinations and purpose of trip.

Automobile Rentals: Not to exceed **\$50.00 per day** plus applicable taxes. Extra optional insurance or rental company gasoline costs are unallowable. Weekly or Monthly rates should be used when applicable. Upgrades beyond economy-sized require an explanation. Use of automobile rental not related to the project is unallowable.

Hotel Rates: Weekly and Monthly rates are encouraged and expected when applicable. Reimbursable costs shall not exceed **\$92.00 per day** plus applicable city/state/county taxes or current state rate applicable at the time cost is incurred.

Meals (Food Costs): Meal receipts are not required. Actual costs are allowable up to a maximum Per Diem allowance of **\$46.00 per day** or current state rate applicable at the time cost is incurred. Meals are only reimbursable with overnight lodging away from headquarters. *Tips and alcohol are not reimbursable. Per meal maximums for partial day travel are as follows: Breakfast \$8.00, Lunch \$12.00 and Dinner \$26.00 and are adjusted proportionately to a change in the current state rate.*

Other - Taxi, Bus, Limousine, Subway, etc.: Only reasonable and prudent costs (with explanations) are reimbursable. *Tips are not reimbursable.*

Entertainment Costs: Entertainment costs are not reimbursable, including: 1. Movie costs for “Pay for View” or Cable service. 2. Alcohol costs. 3. Monetary Tips (tipping) for any and all services related to all forms of travel (and/or entertainment).

Communication Costs: Long Distance telephone calls need to be identified and strictly related to work performed under this Agreement in order to be reimbursable by Authority. A log is

preferred showing the date, person's name called, and explanation. Cell phone monthly charges are reimbursable if usage is strictly related to work performed under this Agreement. Legible itemized cell phone records are required.

Receipts: Legible itemized receipts are required for the following: 1. Hotel (lodging) costs. 2. Airfare travel costs. 3. Parking costs. 4. Automobile or Equipment Rental costs. 5. Taxi, Limousine, Bus, Subway, or other travel costs. 6. Reproduction. 7. Shipping and Handling. 8. Local Postage/Deliveries (courier services). 9. Communication Costs. ***Tips and alcohol are not reimbursable.***

ATTACHMENT F ORGANIZATION CHART

