STATE OF TEXAS)(
)(
CAMERON COUNTY)(

AMENDED AND RESTATED INTERLOCAL AGREEMENT

THIS AMENDED AND RESTATED INTERLOCAL AGREEMENT is entered into by and between the CAMERON COUNTY REGIONAL MOBILITY AUTHORITY, hereinafter referred to as "CCRMA" and the City of Los Fresnos, hereinafter referred to as "CITY", pursuant to V.T.C.A., Government Code, and Chapter 791, whereby:

1. PURPOSE OF INTERLOCAL AGREEMENT: To allow the CCRMA, to develop Preliminary Engineering and Environmental documents as well as Plans, Specifications, and Estimates, and complete any project development activities required to develop the project to a Ready-to-Let Status for construction. This project has Category 7 funds for Construction at the Rio Grande Valley Metropolitan Planning Organization in addition to the local funds listed in this agreement being used to expedite project development.

2. PROJECT TO BE COMPLETED: To advance the Los Fresnos Hike and Bike Trail Projects throughout the City to a Ready-to-Let Status with TxDOT. Project Limits are the territorial limits of the City of Los Fresnos.

3. WHEREAS, on March 09, 2023, the CCRMA and CITY entered into an Interlocal Agreement regarding the Los Fresnos hike and Bike Trail Projects throughout the City; and

4. WHEREAS, on February 22, 2024 the CCRMA and CITY amend the Interlocal Agreement to include the funding required for the Preliminary Engineering and Environmental documents as well as Plans, Specifications and Estimates required to develop the project to a Ready-to-Let Status for construction and there is now a need for a second amendment to the Interlocal Agreement to include additional funding for the preliminary engineering services and construction and maintenance with Union Pacific Railroad Company for the affected railroad track and right-of-way (ROW) near the project area.

5. CCRMA HEREBY AGREES TO:

    a. Utilize one of the CCRMA's consultants to develop engineering/design plans within existing ROW, coordinate utility adjustments, and conduct environmental studies, and public involvement.
    b. To provide necessary funding in the amount of $293,283.66 for preliminary engineering, survey, and PS&E activities further outlined in Exhibit A.
    c. Coordinate with the Texas Department of Transportation (TxDOT) the necessary environmental document as well as design and engineering and coordination with any state and federal agencies on any issues arising during the environmental phase and design and engineering.
    d. Conduct any public meetings or hearings required by TxDOT as part of the environmental process.
    e. Provide monthly progress reports of activities to the CITY.
    f. Provide for consultations with the environmental agencies.
    g. Locally let the project through the CITY utilizing CCRMA staff and consultants.
    h. CCRMA will serve as Project Manager.

6. CITY HEREBY AGREES TO:

    a. To have provided necessary funding in the amount of $293,283.66 for preliminary engineering, survey, and PS&E activities further outlined in Exhibit A.

b. To provide funding for any local match for design, construction engineering, and construction required by TxDOT's Advanced Funding Agreement (AFA).
c. To provide the necessary local match funding for the engineering, design, construction, and construction engineering of hike and bike trail.
d. To provide funding in the amount of $65,000.00 for preliminary engineering services and construction and maintenance with Union Pacific Railroad Company for the affected railroad track and right-of-way near the project area further outlined in Exhibit B.

7. It is specifically understood and agreed that in the event insufficient funds are appropriated and/or budgeted concerning the obligations under this Interlocal Agreement on behalf of either of the Parties, then the Party with the insufficient funds shall notify the other Parties and this Interlocal Agreement shall thereafter terminate and be null and void on the last day of the fiscal period for which appropriations were made without penalty, liability or expense to the Party. The Party with the insufficient funds agrees to indemnify the other Parties to the extent of the amount(s) for which the other Parties are entitled to receive for reimbursement.

8. Any payment made by either party will be made from current revenues of the paying party.

9. This Interlocal Agreement constitutes a one-time Agreement between the Parties and does not constitute a continuing Agreement for the CCRMA and CITY. The Interlocal Agreement expires when the Projects are completed or a 30-day termination notice is given by either CCRMA or CITY.

10. The Rules, Regulations and Orders of the CCRMA shall govern this Interlocal Agreement and the Parties agree that the CCRMA shall supervise the performance of this Interlocal Agreement. It is also agreed that the CCRMA has the authority to employee personnel to engage in other administrative or governmental functions and services necessary to fulfill the terms of this Agreement.

11. The CCRMA and CITY hereby find that the foregoing goods and governmental functions and services are reasonably required for the Project and this Interlocal Agreement includes an agreement between the CCRMA and CITY pursuant to TEX. GOV'T CODE Section 791.025 to the extent applicable.

12. This Interlocal Agreement shall have no legal force or effect until such time as it is properly Adopted and Approved by the CAMERON COUNTY REGIONAL MOBILITY AUTHORITY BOARD OF DIRECTORS and the CITY OF LOS FRESNOS CITY COMMISSION.

Executed on this 30th day of October 2025.

Attested by: _____
Arturo A. Nelson
CCRMA Secretary

_____
Frank Parker, Jr.
CCRMA Chairman

Attested by: _____
Jacqueline Moya
City Secretary

_____
Alejandro Flores
Los Fresnos City Mayor

EXHIBIT "A"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

PROJECT DESCRIPTION

The services designated herein as "Services provided by the ENGINEER" shall include the performance of all engineering services for the following described facility:

COUNTY/CITY: CCRMA

CONTROL:

PROJECT/DESCRIPTION: Los Fresnos Hike & Bike Trail

LENGTH: 2.1 Miles

HIGHWAY: Various (Circles the City of Los Fresnos)

LIMITS: 0.2 Miles South of Old Port Rd to S. Arroyo Blvd.

PROJECT CLASSIFICATION

(Place an "X" in only one Project Classification)

___ Surface Treatment
___ Overlay
___ Rehabilitation Existing Road (Scarify & Reshape)
___ Convert Non-Freeway to Freeway
___ Widen Freeway
___ Widen Non-Freeway
___ New Location Toll Freeway
___ New Location Non-Freeway
___ Interchange (New or Reconstruct)
___ Bridge Widening or Rehabilitation
___ Bridge Replacement
___ Upgrade to Standards - Freeway
___ Upgrade to Standards - Non-Freeway
_X_ Sidewalk/Hike & Bike Project

ENGINEER shall mean GDJ Engineering.

LPA shall mean CCRMA.

ROUTE AND DESIGN STUDIES
(Function Code 110)

ROUTE AND DESIGN STUDIES:
The ENGINEER will perform any of the following tasks needed for the route and design studies:

1. Develop Roadway Design Criteria

2. Prepare the Design Schematic
    a. Horizontal and Vertical Alignment
    b. Schematic Layout
        i. Identify the location of intersections as applicable.
        ii. Develop vertical and horizontal alignment. The degree of horizontal curves and vertical curve data, including "K" values, shall also be shown for ease of reviewing the schematic.
        iii. Show the location and text of the proposed guide signs. Lane lines and/or arrows indicating the number of lanes shall also be shown.
        iv. Provide a complete explanation of the sequence and methods of stage construction, if proposed.
        v. Identify the tentative ROW limits
            1. Provide a roadway Design System (RDS) or (GEOPAK) computer tape of the preliminary earthwork to verify ROW requirements.
            2. Provide a graphics file containing the approved schematic.
        vi. Provide the geometric configuration (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections.
        vii. Label the direction of traffic flow on all roadways.
        viii. Identify the location and width of any proposed median openings for highways without access control.

3. Coordinate and Attend a Preliminary Design Concept Conference

4. General Guidelines for Project Development
    a. A preliminary schematic layout shall be prepared which indicates the general geometric features and location requirements peculiar to the project. An uncontrolled aerial mosaic will be provided for this use. The schematic layout shall be submitted through the district to the Design Division for approval. **No geometric design is to be performed until the LPA has given the engineer written approval of the preliminary schematic layout.**
    b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the STATE.
    c. The schematic layout shall include basic information which is necessary for the proper review and evaluation including the items listed above and in the schematic checklist provided by the STATE.
    d. Handling of traffic during construction shall be a consideration in the development of the schematic.
    e. Upon approval of the schematic layout by Design Division (FHWA on Federal-aid projects), it shall be the basis for an exhibit at any required public hearing prior to final development of the project. If there are any changes to the schematic after the Design Division and FHWA approval and before the public hearing, the revised schematic, as displayed at the hearing, shall be submitted either prior to or accompanying the public hearing data. If there are no changes in the schematic as displayed at the hearing, only

photographs of the schematic and other displays shall be submitted with the public hearing data.

f. On complex projects, informal contact through the district with the Design Division and FHWA personnel is encouraged with regard to development of preliminary design prior to official schematic submission.

g. The engineer shall furnish a project tape that is compatible with the STATE's computer system, a project listing, and a cross section plot showing the original design sections containing the earthwork input and original cross sections for the project. **Accuracy of the earthwork design is of utmost importance since it is the basis for contractor payments and construction staking.**

5. Traffic Analysis and Projections
   a. If the project is Off-System, the ENGINEER will provide all traffic analysis and projection data for the project as previously provided by TxDOT's Transportation Planning and Programming Division. The analysis will follow the STATE's SOP and the data will be approved by the STATE.

6. Geotechnical Investigations, Engineering & Report
   a. The ENGINEER shall provide geotechnical explorations and laboratory testing as needed for the project. All exploration and test procedures will be performed in general accordance with the latest Texas Department of Transportation Geotechnical Manual and TEX methods (or ASTM methods as required).
   b. The ENGINEER shall provide geotechnical engineering and analysis of the explorations and laboratory testing.
   The ENGINEER shall provide a signed/sealed geotechnical report of all findings including relevant recommendations for pavement design (lime percentage, salvage, thicknesses, etc…)

SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

(Function Code 120)

1. Environmental Reports (All Environmental Reports shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations, Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.)

2. Public Involvement (All Public Involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 2.101-2.110, Code of Federal Regulations Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.)
   a. A public involvement meeting(s)/hearing(s) shall be scheduled, coordinated and conducted.*
   b. Technical assistance, meeting(s)/hearing(s) preparation, maintenance of contracts lists, minutes of meeting(s), exhibit preparation, and other tasks outlined by the LPA, shall be provided.

3. Cultural Resources (Formal consultation with the State Historic Preservation Office (SHPO) and the Texas Historical Commission (THC) will be conducted by the LPA.)
   a. Historic Structure Studies

i. A records search and reconnaissance survey shall be performed, and documentation prepared regarding identification efforts, National Register eligibility and potential impacts to historic properties in accordance with the state's historic structure requirements.

b. Archeological Studies
   i. Files searches shall be conducted to determine if known archeological sites are present; to identify whether these sites have been listed or determined eligible for the National Register of Historic Places or have been designated State Archeological Landmarks; and to identify the need (if any) to perform additional archeological investigations.
   ii. Archeological reconnaissance will be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.
   iii. Archeological survey shall be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.

4. Technical Reports
   Technical reports will be scoped with TxDOT's Work Plan Development Tool (WPD) and prepared in accordance with the TxDOT Environmental Toolkit.

   a. Biological Assessment
      i. A Species Analysis and Site Assessment will be completed in accordance with the STATE'S guidelines. The assessment shall be provided as a Technical Report and results included in the administratively complete document for the project.

   b. Water Resources
      i. A Surface Water Analysis will be completed in accordance with the STATE'S guidelines. The analysis shall be provided as a Technical Report and results included in the administratively complete document for the project.

   c. Community Impact Analysis
      i. A Community Impact Assessment will be completed in accordance with the STATE'S guidelines. The analysis shall be provided as a Technical Report and results included in the administratively complete document for the project.

5. General Guidelines for Preparation of Environmental Documents
   a. All technical reports will be submitted electronically to TxDOT.
   b. All cultural resource reports (i.e. Archeological and Historical Project Coordination Requests (PCRs), background and reconnaissance surveys), if required, will be submitted electronically to TxDOT.
   c. The draft administratively complete document will be submitted to TxDOT electronically.
   d. The administratively complete document will be prepared in accordance with the content and format of TxDOT Administrative Code 43 TAC §2.48 and the TxDOT Environmental Toolkit.
   e. The administratively complete document will be submitted to TxDOT electronically.
   f. Upon completion and approval of the administratively and technically complete document, the Engineer will provide one (1) hard copy to the Client.
   g. Exhibits in the environmental document shall be color copies and text shall be black and white.

RIGHT-OF-WAY DATA

(Function Code 130)

NOTE: No work involving right-of-way (ROW) data is to be performed until the LPA has given the ENGINEER written approval of the final location of the proposed ROW lines.

The ENGINEER shall perform the following Right-Of-Way Data duties:

1. Provide Ownership Data in a .dgn file
    a. For the entire project limits
    b. Compensable utility ownership that has property rights on ROW shall be researched and provided.
    c. For each drainage outfall property
    d. For each irrigation structure pipe

2. Parcel Plats
    a. Parcel plats and field notes shall be prepared and furnished.
    b. All plats and field notes must be signed and sealed by a Registered Professional Land Surveyor (RPLS).

3. Utilities (Compensable)
    a. Property ownership with recording information shall be shown on ROW Map and Parcel Plats with distance ties to property corners in an effort to locate utility.

4. Field Notes
    a. Field notes and plats shall be provided, signed and sealed by a Registered Professional Land Surveyor, for all parcels on the ROW Map.
    b. Computation sheets for survey closure and area of each parcel shall be provided.
    c. Ground surveys and preparation of parcel maps, legal descriptions, and ROW maps

5. Survey and Stake Right-of-Way

6. Records as required by the LPA and State
    a. Records used to establish property ownership

PROJECT SPECIFIC SCOPE OF SERVICES

FC 130 – RIGHT-OF-WAY DATA – Abstract analysis, development of ROW Map sheets including parcel plats and field notes with Metes & Bounds field descriptions, and Title Commitments.

FC 150 – FIELD SURVEYING FOR PARCEL MAPPING – Recover horizontal & vertical control, locate and field tie existing ROW and boundary corners. Update topography, and reestablish corners for ROW map revisions.

SURVEYING SCOPE OF SERVICES FOR PARCEL MAPPING

FC 130 – RIGHT-OF-WAY DATA

Right-of-Way Documents - The SURVEYOR will utilize State examples and provide the following:

GENERAL

a. Abstracting: The SURVEYOR will determine Ownership Data.

b. Prepare individual parcel maps and field notes as needed to properly describe the right-of-way the State is to acquire.
c. All procedures involving right-of-way maps will be in accordance with the STATE'S Right-of-Way Book I and Book II, the State's local operating procedures and according to the Texas Board of Professional Land Surveying Practices Act.
d. All required documents will be in English units.
e. The SURVEYOR will monument all corners with a 5/8 inch iron rod with a Surveyor's plastic cap on all parcel boundary corners.
f. The SURVEYOR will provide to the STATE a copy of Instruments of Record.
g. The SURVEYOR will attach graphics files compatible with the latest version of Micro-Station graphics software.
h. The SURVEYOR will attach documents or text files compatible with the latest version of Word software.

PARCEL PLATS

a. A parcel plat will be prepared for each parcel of land to be acquired. The STATE has developed standard formats for parcel plats, copies of which the SURVEYOR will request and secure for all purposes
b. Parcel boundary lines will be delineated with appropriate bearings, distances, and curve data.
c. Private property lines will be delineated with appropriate bearings, distances, and curve data to the extent necessary to describe the individual parcels of land to be acquired.
d. League lines and survey lines will be shown and identified by name and abstract number.
e. A north arrow will be shown on each sheet and, if possible, in the upper right hand corner.
f. Monumentation set or found will be shown and described as to material and size.
g. A station and offset will be shown for each PC, PT, and angle point in the proposed right-of-way lines and the existing right-of-way lines in areas of no proposed acquisition.
h. Intersecting streets will be shown and identified by name and right-of-way width.
i. A parent tract inset will be shown for each parent tract.
j. A note will be included on each map sheet stating the basis of bearings, coordinates, and datum used.
k. Appropriate notes will be included on the title sheet stating the following:
a. Month(s) and year abstracting was performed upon which the map is based.
b. Month(s) and year field surveys were conducted upon which the map is based.
c. Month and year map was completed by the SURVEYOR.
l. The right-of-way account number and R.O.W. CSJ if available will be shown on each parcel map sheet.
m. All parcel maps should be 8-1/2" x 11" signed and sealed by a Registered Professional Land Surveyor and note referencing legal description.
n. The acreage of the part taken should be shown to three decimal places, rounded.

FIELD NOTE DESCRIPTIONS

A field note description will be prepared for each parcel of land to be acquired. Field note descriptions will include, but need not be limited to, the following:

a. The field note description will begin with a general description that will include, as a minimum:
   (1) State, county, and city within which the proposed parcel of land to be acquired is located.
   (2) A reference to unrecorded and recorded subdivisions by name, lot, block, and recording data to the extent applicable.
   (3) A reference, by name, to the grantor and grantee, date, and recording data of the most current instrument(s) of conveyance describing the parent tract.

b. The field note description will continue with a metes and bounds description that will include, as a minimum:
   (1) A point of commencing (outside property corner).
   (2) A point of beginning on proposed R.O.W. line.
   (3) A series of courses, identified by number and proceeding in a clockwise direction, describing the perimeter of the parcel of land to be acquired, and delineated with appropriate bearings, distances, and curve data.
   (4) A description (8-1/2" x 11") of all monumentation set or found to include, as a minimum, size and material.
   (5) All field note descriptions will be signed and sealed by a Registered Professional Land Surveyor.
   (6) Note referencing parcel plat.

FIELD SURVEYING AND PHOTOGRAMMETRY

(Function Code 150)

TOPOGRAPHY AND CONSTRUCTION SURVEYS:

The SURVEYOR will perform Topography and Construction Surveying for the project which will include:

1. Primary Project Control: 3 to 5 mile spacing (Precision shall be 1 part in 20,000 or better, unless otherwise directed by the ENGINEER).
   a. Establish Horizontal Control Points
   b. Establish Vertical Control Points

   NOTE: ALL BEARING AND DISTANCE SHALL BE BASED ON THE STATE PLANE COORDINATE SYSTEM NAD 1983, SOUTH ZONE.
   ALL DISTANCES AND COORDINATES SHALL BE SURFACE AND MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999960

2. Secondary Project Control (Surveyor shall recover and/or reset H&V Control Points as provided by the Engineer and create Survey Data Sheets for inclusion in the Project Plans).
   a. No traverse should exceed 25 angle points. Planimetrics shall be 20 ft Lt & Rt from the proposed ROW as per the schematic provided by the Engineer.
   b. The unadjusted angular error should not exceed 2 seconds per angle, plus 14 seconds.
   c. The unadjusted ratio of precision should be one part in 10,000 or better (The ratio of precision is the total length of the traverse divided by the total error.).
   d. The unadjusted vertical error should not exceed 0.03 foot per mile of traverse.

3. Other Field Surveying
    a. **The limit of the Design surveys shall be 1,500-ft before and after the limits of the project as identified by the Project Engineer on the schematic. Establish horizontal and vertical control.** Set benchmarks at 1000-ft intervals along the project proposed right-of-way. Provide x, y, z for each Benchmark. Provide a BM along each outfall identified on the Hydrologic Map. The BM's shall be #5 I.R. 2-ft in depth set in concrete. **The surveyor shall provide an H&V Book (a Sample shall be provided by the Engineer to the Surveyor).** The Surveyor will provide a 3-pt reference sketch with ties to the BMs for inclusion the existing H&V Control Book. Establish benchmark circuit throughout the project with a tolerance of 0.03'/ft per mile error vertically.
    b. The Surveyor shall provide complete topographic and cross section survey, data processing, and CADD mapping (2D & 3D) for the limits of the project.
    c. The Surveyor shall locate all visible utilities, data processing and CADD mapping (2D & 3D) including irrigation lines. Follow sample provided by the Engineer.
    d. The Surveyor shall field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2D & 3D).
    e. Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the Surveyor.
    f. The Surveyor shall also paint the proposed centerline on the existing pavement as approved by the ENGINEER (at 500-ft stations and a tick mark at 100-ft stations, 12 inches long with approved paint by ENGINEER) before construction for the purpose of utility adjustments and project location.
    g. Profile and cross section intersecting streets for ties into project (500-ft. beyond the proposed ROW per schematic and 20-ft wider than the existing ROW of intersecting street). Reference missing voids as per CD provided by the Engineer.
    h. Cross section irrigation crossings for a distance of 20-ft beyond the proposed ROW at 100-ft intervals in a DTM file. Provide a complete description of irrigation appurtenances as identified by the engineer sample layout.
    i. Tie Horizontally and Vertically the existing storm drain system that lies within the existing proposed ROW including the elevation of the outfall of said recovered existing storm drain systems.
    j. Tie to existing underground and overhead utilities (location, elevation and direction)
        i. Horizontally - The surveyor shall call the 1-800 number for the utilities to be marked on the ground as well as any city water and sewer lines. He shall tie all visible utility crossings with name, address and Phone #'s of utility companies. The engineer will coordinate with the utility companies and jointly the Surveyor and the Engineer will identify which utilities were missed and need to be tied down.
        ii. Vertically - The engineer shall identify all utilities that are potential conflicts and that need to be tied vertically. The engineer will advise the surveyor in writing of the needed vertical ties and the surveyor will tie the lines vertically once the surveyor has coordinated the exposure and provide the information to the engineer.
    k. Additional Field Surveying as shown below:
        i. Irrigation Lines - The surveyor will meet with the engineer before he ties down any irrigation lines. The Engineer will provide him the existing Irrigation District Maps and the A&M Data of existing irrigation lines that are identified of record. He will follow the sample given to him by the engineer and tie the structures horizontally and vertically and provide Field Books to the engineer.
        ii. Outfalls - The surveyor will provide a complete 2D & 3D File including utilities of the outfall identified on the Hydrologic Map.

l. Driveways and Turnouts
    i. Inventory commercial entrances, public roads and side streets separately.
    ii. Obtain centerline station (Width at ROW, Pavement and existing radius).
    iii. Inventory by type (dirt, caliche, gravel or paved). If paved, indicate condition in terms of no patches, has patches or has potholes.
    iv. Obtain width at ROW line
    v. Obtain elevations at both edges of the driveway or turnout in line with any side drain.
m. ROW Staking (Existing and proposed @ 1,000 ft stations, PC's, PT's and Angle points as per ROW Map)
n. Soil core hole staking
o. Determine changes in topography from voids and outdated maps due to development, erosion, etc.
p. Profile existing drainage facilities, if applicable
q. Measure hydraulic openings under existing bridges, if applicable
r. Obtain elevations of manholes and valves of utilities, if applicable
s. Provide temporary signs, traffic control, flags, safety equipment, etc.
t. Provide ties to existing bridges or culverts that may conflict with new construction
u. If there is a Bridge widening, provide top of deck and/or top of cap elevations at the Profile Grade Line (PGL) and the edges of slab at bent locations.
v. Inventory signs, mailboxes and driveways
w. Survey controlled data sheets as per STATE guidelines

ADDITIONAL RESPONSIBILITIES

A. TRAFFIC CONTROL:

The SURVEYOR shall control traffic in and near surveying operations adequately to comply with provisions of the latest edition of the TxDOT Manual on Uniform Traffic Control Devices – Part VI and the latest edition of the Occupational Safety Manual both of which can be found on the TxDOT internet site.

In the event field crew personnel must divert traffic or close traveled lanes, a Traffic Control Plan based upon principles outlined in the latest edition of the TxDOT Manual on Uniform Traffic Control Devices – Part VI shall be prepared by the SURVEYOR and approved by the ENGINEER prior to commencement of field work. A copy of the approved plan shall be in the possession of field crew personnel on the job site at all times and shall be made available to the ENGINEER for inspection upon request.

B. INVOICING:

Payment requests shall include a SURVEYOR's invoice. With each payment request, the SURVEYOR shall submit a project status report which will, as a minimum, include the percentage of total work complete as of the date of the payment request and a description of current work activity. The percentage of total work complete shall not be based simply on the percentage of funds expended, but shall be based on the best judgment of the SURVEYOR as to the percentage of actual work complete.

C. EASEMENTS, LETTERS OF PERMISSION, ETC.

The SURVEYOR shall be responsible for delineating easements. The SURVEYOR will be responsible for securing the necessary legal instruments and obtaining all Right-of-Entries (ROEs).

D. MEETINGS:
The ENGINEER shall setup the necessary meetings with the SURVEYOR in order to assure all field information is provided on-time and products are delivered in accordance with TxDOT's/LPA's specifications. SURVEYOR must attend all meetings involving data provided if requested by ENGINEER.

E. PROJECT MANAGER/SURVEYOR COMMUNICATION:
The SURVEYOR shall designate one Texas Registered Professional Land Surveyor (RPLS) to be responsible throughout the project for project surveying coordination and all communications, including billing, with the ENGINEER.

F. OFFICE LOCATION:
The SURVEYOR will perform the services to be provided under this agreement out of a local office and have a crew available to perform requested tasks within 24 hours of request. The coordinating SURVEYOR's Project Manager (RPLS) shall be accessible at all times and working from the local office.

ROADWAY DESIGN CONTROLS
(Function Code 160)

ROADWAY DESIGN:
The ENGINEER will perform roadway design services for the needed construction repairs along the project limits. The services will include:

1. Geometric Design
    a. Horizontal Alignment
    b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the LPA.
    c. Handling of traffic during construction shall be a consideration in the development of designs.

2. Exhibits for Airway/Highway clearance permits (if within airport vicinity)

3. Grading Design
    a. Refine the horizontal alignment including the following items
        i. Typical Sections
        ii. Design Cross Sections
        iii. Determine Cut and Fill Quantities

DRAINAGE
(Function Code 161)

DRAINAGE DESIGN:
The ENGINEER will perform drainage design services for the needed construction repairs along the project limits. All hydraulic design shall be in accordance with TxDOT's Hydraulic Manual, except where variances are permitted in writing by the LPA. The services will include:

1. Hydrologic & Hydraulic Studies, Discharges
    a. Hydrologic Map showing drainage areas, contours and drainage Q's.

b. Drainage area maps showing existing conditions and proposed improvements.
c. Hydrologic data/discharge determination

2. Hydraulic Drainage Study & Documentation
    a. Hydraulic Computations, if applicable
        i. Storm water detention available within the ROW (linear ft. along side drain ditch).
        ii. Storm water detention available outside the ROW (as per local Drainage District)
        iii. Culverts
        iv. Bridge Waterways
        v. Channels
        vi. Storm sewers/inlets
        vii. Pump Stations
        viii. Storm Water Management Facilities
        ix. Irrigation Canals/Siphons
    b. Hydraulic Reports
    c. Federal Emergency Management Agency (FEMA) floodway requirements
    d. Determine impact of proposed drainage plan on Drainage District or Irrigation District receiving streams

3. Layout, Structural Design and Detailing of Drainage Features
    a. Culverts
        i. New Culverts
        ii. Culvert widening and/or lengthening
        iii. Culvert replacements
    b. Storm Sewers
        i. New storm sewers
        ii. Modify existing storm sewers
        iii. Inlets
        iv. Manholes
        v. Trunk lines
    c. Outfall channel(s) within the ROW
    d. Outfall channel(s) outside the ROW
    e. Summary of Quantities

4. Storm Water Pollution Prevention Plan (SW3P)

SIGNING, MARKINGS AND SIGNALIZATION

(Function Code 162)

PAVEMENT MARKINGS:

The ENGINEER will provide pavement marking layouts for the needed construction repairs along the project limits. The services will include:

1. Signing and Markings Layout
    a. Roadway layout
    b. Center line with station numbering
    c. ROW lines
    d. Culverts and other structures that present a hazard to traffic
    e. Location of utilities, if not shown on plan and profile
    f. Existing signs to remain, to be removed, to be relocated

g. Proposed signs (illustrated and numbered)
h. Existing overhead sign bridges to remain, to be revised, removed or relocated
i. Proposed overhead sign bridges indicating location by plan layout (electrical details need not be shown on this layout)
j. Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation
k. Quantities of existing pavement markings to be removed
l. Proposed delineators and object markers

2. For projects involving freeway to freeway or other types of directional interchanges, projects including left-hand ramps or connections, the following information must be provided:
   a. The location of interchanges, main lanes, grade separations, frontage roads and ramps
   b. Complete explanation of the sequence and methods of stage construction, where applicable, which would include the initial and ultimate proposed treatment of crossovers and ramps
   c. The number of lanes in each section of proposed highway and the location of changes in number of lanes
   d. The projected traffic volumes as provided by the STATE (20 year traffic projection, unless otherwise determined by the District Engineer)
   e. Tentative ROW limits
   f. Direction of traffic flow on all roadways
   g. Main lane, ramp, frontage road and necessary cross road profiles at proposed interchanges or grade separations

3. Summary of Small Sign Tabulation

4. Summary of Large Sign Tabulation including all Guide Signs (if applicable)

5. Sign Detail Sheets
   a. All signs except for route markers
   b. Design details for large guide signs
   c. Dimensions of letters, shields, borders, corner radii, etc.
   d. Designation of shields attached to guide signs
   e. Designation of arrow used on exit direction signs

MISCELLANEOUS ROADWAY

(Function Code 163)

TRAFFIC CONTROL PLAN, DETOURS AND SEQUENCE OF CONSTRUCTION:

The ENGINEER will provide a Traffic Control Plan (TCP) for the needed construction repairs along the project limits. TCP's are required for all projects; therefore a detailed TCP shall be developed when traffic handling during construction involves complications for which a feasible solution is not covered by the Texas MUTCD or the current Barricade and Construction (BC) standards. The following items are required on all TCP Layouts:

1. The Sequence of Construction and method of handling traffic during each phase
2. Roadway layout
3. Center line with station numbering
4. The existing and proposed traffic control devices that will be used to handle traffic during each construction sequence. Include signals, regulatory signs, warning signs, construction warning

signs, guide signs, route markers, construction pavement markings, channelizing devices, portable changeable message signs, flashing arrow boards, barricades, barriers, etc…

5. The proposed traffic control devices (stop signs, signals, flag person, etc.) at grade intersections during each construction sequence.
6. Where detours are provided, typical cross sections shall be shown.
7. Road construction work hours shall be developed after an investigation of the traffic volumes has been performed.

COMPUTE AND TABULATE QUANTITIES:
The ENGINEER will provide a summary of quantities sheet in the plans identifying all estimated project quantities.

PROJECT ESTIMATE:
The ENGINEER will provide a project estimate summarizing all estimated construction costs.

SPECIFICATIONS AND GENERAL NOTES:
The ENGINEER will provide all relevant project specification and general notes to the project construction activities.

PROJECT MANAGEMENT
(Function Code 164)

MEETINGS, COORDINATION & SUPPORT FOR PROJECT MANAGEMENT:
The ENGINEER shall assist and coordinate with LPA staff for meetings and coordination efforts with all relevant entities (i.e. County, Regional Mobility Authority, Texas Department of Transportation, Rio Grande Valley Metropolitan Planning Organization, etc…) and other affected parties. The Engineer shall coordinate with the Owner's staff on all Project related items.

CONSTRUCTION PHASE SERVICES
(Function Code 320)

The ENGINEER will provide engineering support services for letting the Project or portions of the Project approved by the LPA. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the ENGINEER will include the following:

CONSTRUCTION BIDDING:

1. The ENGINEER will furnish the LPA the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

2. The ENGINEER will assist the LPA in the development of the Bid Documents for the purpose of providing to potential bidders to the project.

3. The ENGINEER will assist the LPA on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

ADDITIONAL RESONSIBILITIES

EASEMENTS, LETTERS OF PERMISSION, ETC.:
The ENGINEER shall be responsible for delineating easements. The ENGINEER will be responsible for securing the necessary legal instruments.

MEETINGS:
Meetings will be held with the FHWA, State Officials, local governments, property owners, utility owners, railroad companies, other consulting firms, etc., as needed or required by the LPA. The ENGINEER shall coordinate through the LPA for the development of this project with any local entity having jurisdiction or interest in the project (i.e., city, county, etc).

SPECIFICATIONS, SPECIAL PROVISIONS, SPECIAL SPECIFICATIONS:
Use the State's standard specifications or previously approved special provisions and/or special specifications. If a special provision and/or special specification is developed for this project, it shall be in the State's format and incorporate references to approved State test procedures.

PROJECT MANAGER/ENGINEER COMMUNICATION:
The ENGINEER shall designate one Texas Registered Professional Engineer to be responsible throughout the project for project management and all communications, including billing, with the LPA's Director. Any replacements to the ENGINEER's designated Project Manager/Engineer must be approved by the LPA.
Engineering documents produced for the department's engineering projects shall be signed, sealed and dated or CADD sealed in accordance with Administrative Order No. 5-89 and Administrative Circular No. 26-91.

DESIGN RESPONSIBILITIES:
The ENGINEER is responsible for design errors and/or omissions that become evident before, during or after construction of the project. The ENGINEER's responsibility for all questions arising from design errors and/or omissions will be determined by the LPA and all decisions shall be final and binding. This would include, but not necessarily be limited to:

1. All design errors and/or omissions resulting in additional design work to correct the errors and/or omissions.
2. Preparation of design documents and detail drawings necessary for a field change due to design errors and/or omissions.
3. Revision of original tracings to the extent required for a field change due to design errors and/or omissions.

The ENGINEER shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of the work by the LPA will not relieve the ENGINEER of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities.

DOCUMENT AND INFORMATION EXCHANGE:
Data, Plan Sheets, General Notes and/or Specifications provided to the LPA shall be furnished via file share links complete with a table of contents on what is transmitted. The Table of Contents shall indicate the locations of files within the directory structure of the documentation.

General Notes and specifications shall be provided in the latest Office 365 file formats (.docx, .xlsx, etc…). Plan sheets shall be provided in Microstation Open Roads Designer (ORD)/Power GEOPAK format. PDF copies of plan sheets shall also be provided.

Two copies of the documentation shall be provided to the LPA.

PROPOSAL TIME:
The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

OFFICE LOCATION:
The ENGINEER will perform all services to be provided under this agreement out of their office located at: 2805 Fountain Plaza Blvd., Suite A, Edinburg, Texas 78539

Fee Estimate

GRJ Engineering

Los Fresnos Hike & Bike Trail Project - CCRMA

	Los Fresnos Hike & Bike Trail (From 0.2 Miles South of Old Port Rd to South Arroyo Blvd.) Cameron County Regional Mobility Authority	MANHOURS											
		Senior Project Manager/ Principal	Project Manager	Project Engineer	Utility/ Environmental Manager	Environmental Specialist	EIT	Senior Engineering Tech	GIS Operator	Engineering Tech	Admin/Clerical	Total Hours	Total Line Item Cost
	TASK												
	Preliminary Engineering												
1	Data Collection			8	0		18	28	28	0		82	$ 7,415.12
2	Feasability Study/Alternatives	SEE SUBCONSULTANT FEE SCHEDULE (PAGE 1 OF 6)											$ 4,683.68
3	Geometric Schematic Work												
3A	Import Survey Data into Schematic File & Analyze Data			4	10		16	18		28		76	$ 6,780.20
3B	Design Plan View Layout		4	12			16	18		28		78	$ 7,177.00
3C	Detail Plan View Layout		4	8			16	28		34		90	$ 8,013.82
3D	Design Profile View Layout		4	16			16	28		34		98	$ 9,125.18
3E	Detail Profile View Layout		4	6			16	28		34		88	$ 7,735.98
3F	Develop Proposed Cross Section Roll Plot for Schematic Purposes		6	12			16	28		34		96	$ 8,873.82
4	Corridor & Route Alternatives	SEE SUBCONSULTANT FEE SCHEDULE (PAGE 1 OF 6)											$ 4,683.68
5	Development of Typical Sections		4	6			8	10				28	$ 2,987.44
6	Aerial Mapping/Survey	SEE SUBCONSULTANT FEE SCHEDULE (PAGE 2 OF 6)											$ 31,690.78
7	Geotechnical Studies	SEE SUBCONSULTANT FEE SCHEDULE (PAGES 3-4 OF 6)											$ 54,421.24
	Hydrologic/Hydraulic Studies	TASK NOT NEEDED											$ -
	Traffic Studies	TASK NOT NEEDED											$ -
8	Project Cost Estimates		4	8	4		8					24	$ 2,831.36
9	Engineering Summary Report		4	8	4		6					22	$ 2,685.84
10	Quality Assurance/Quality Control		4	16			8					28	$ 3,413.44
11	LGPP Checklist for Preliminary Engineering		4	6	4							14	$ 1,971.44
	Subtotal (Preliminary Engineering)	**0**	**42**	**110**	**22**	**0**	**144**	**186**	**28**	**192**	**0**	**724**	**$ 164,490.02**
	Environmental												
12	Data Collection			2	20	64	40		24			150	$ 14,154.96
	Environmental Work Plan (WPD I & II)	TASK NOT NEEDED											$ -
	CE, EA, EIS Environmental Document	TASK NOT NEEDED											$ -
13	Perform Species Analysis				8	106			42			156	$ 15,023.68
14	Surface Water Analysis/Wetland Delineation				8	106			24			138	$ 13,546.96
15	Technical Report - Cultural Resources	SEE SUBCONSULTANT FEE SCHEDULE (PAGES 5-6 OF 6)											$ 8,763.00
16	Coastal Boundary Assessment			2	8	106			16			132	$ 13,168.48
17	Technical Report - Hazmat				8	82			16			106	$ 10,508.88
18	Technical Report - Community Impacts				8	106			16			130	$ 12,890.64
19	Public Involvement/Meeting/MAPO/Agency Coordination	4	8	16	40	60	26	26	26	26	24	256	$ 25,059.18
	Subtotal (Environmental)	**4**	**8**	**20**	**100**	**630**	**66**	**26**	**164**	**26**	**24**	**1068**	**$ 113,115.78**
	ROW & Utilities												
20	Data Collection				4		14	18	8	24		68	$ 5,655.20
21	ROW Mapping	ROW MAPPING COST = $4,304.94/PARCEL (TOTAL FEE TBD PENDING PARCEL COUNT)											$ -
22	ROW Coordination	2	6	10			20					38	$ 4,088.16
23	Subsurface Utility Engineering (SUE)	SEE SUBCONSULTANT FEE SCHEDULE (PAGE 2 OF 6)											$ 13,039.05
24	Utility Coordination	2	4	8	36					8		58	$ 7,386.72
25	ROW Cost Estimates	2	4	12			8					26	$ 3,188.56
26	Utility Cost Estimates	2	4	8	18							32	$ 4,432.56
	Subtotal (ROW & Utilities)	**8**	**18**	**38**	**58**	**0**	**42**	**18**	**8**	**32**	**0**	**222**	**$ 37,790.25**

Fee Estimate

Los Fresnos Hike & Bike Trail Project - CCRMA

	Los Fresnos Hike & Bike Trail (From 0.2 Miles South of Old Port Rd to South Arroyo Blvd.) Cameron County Regional Mobility Authority	MANHOURS											
		Senior Project Manager/ Principal	Project Manager	Project Engineer	Utility/ Environmental Manager	Environmental Specialist	EIT	Senior Engineering Tech	GIS Operator	Engineering Tech	Admin/Clerical	Total Hours	Total Line Item Cost
	TASK												
	Plans, Specifications & Estimate (PS&E)												
27	Design Conference	2	2	2	4	4	2					16	$ 1,984.72
28	Environmental Permits, Issues & Commitmnets (EPIC)		2	2	4	4	4			2		18	$ 1,942.54
29	Hydrologic Studies	6	16	44			62					128	$ 14,050.56
30	Final Alignments	4	16	22	16		32	32		48		170	$ 17,114.48
31	Roadway Design												
31A	Roadway Geometric Design	6	24	48	16		42	22		58		216	$ 22,754.38
31B	Develop & Detail Final Profiles	4	18	48			42	22		58		192	$ 19,393.50
31C	Develop Final Cross Sections	6	24	40			56	38		58		222	$ 22,085.66
31D	Develop Plan & Profile PS&E Sheets	4	24	48			50	40		68		234	$ 23,337.80
31E	Detail Removal Items		12	16	10		34	40		46		158	$ 14,989.78
31F	Roadway Design Coordination Efforts (TxDOT, City, County, etc...)	8	24	32	40						8	112	$ 15,153.60
32	Drainage Design												
32A	Develop & Detail Utility & Drainage (U&D) PS&E Sheets	2	40	58			82	44		96		322	$ 31,547.76
32B	Utility Accomodation and Conflict Resolution	10	28	48	42						8	136	$ 18,580.40
32C	Drainage Design Coordination Efforts (Drainage District, Irrigation District)	10	32	58	50						8	158	$ 21,636.80
	Bridge Design/Structures	TASK NOT NEEDED											$ -
33	Traffic Control Plan	SEE SUBCONSULTANT FEE SCHEDULE (PAGE 1 OF 6)											$ 9,367.36
34	Design Review	8	32	40	40							120	$ 17,041.92
35	Cost Estimate	4	8	20			16					48	$ 5,821.44
36	Bid Package	4	8	24								36	$ 5,212.96
37	Letting	2	12	18			26					58	$ 6,549.04
38	LGPP Checklist for Design & Bid Documents	2	6	6	4							18	$ 2,606.56
	Subtotal (Plans, Specifications & Estimate (PS&E))	**82**	**328**	**574**	**226**	**8**	**448**	**238**	**0**	**434**	**24**	**2362**	**$ 271,171.26**
	Total Hours	**94**	**396**	**742**	**406**	**638**	**700**	**468**	**200**	**684**	**48**	**4376**	
Labor Hours		**94**	**396**	**742**	**406**	**638**	**700**	**468**	**200**	**684**	**48**	**4376**	
Contract Rate		**$ 165.40**	**$ 152.16**	**$ 138.92**	**$ 132.32**	**$ 99.24**	**$ 72.76**	**$ 96.32**	**$ 82.04**	**$ 71.55**	**$ 55.04**		
Total Labor Costs		**$ 15,547.60**	**$ 60,255.36**	**$ 103,078.64**	**$ 53,721.92**	**$ 63,315.12**	**$ 50,932.00**	**$ 45,077.76**	**$ 16,408.00**	**$ 48,940.20**	**$ 2,641.92**	**$ 459,918.52**	**$ 586,567.31**

LINE ITEM EXPENSES

N/A	$ -
Total Expenses	$ -
GDJ Engineering Total Cost	$ 586,567.31

"Attachment D"
Fee Estimate
Los Fresnos Hike & Bike Trail - Circles the City of Los Fresnos (Approx. 2.1 miles)

Fee Proposal Task Description	Project Principal	Project Manager	Quality Manager	Senior Engineer	Design Engineer	Senior Engineer Tech	Administrative/ Clerical	TOTAL LABOR HOURS	COST PER TASK
Feasibility Study / Alternatives		1		6	12	12		31	$ 4,683.68
Corridor & Route Alternatives		1		6	12	12		31	$ 4,683.68
Traffic Studies		0		0	0	0	0	0	$ -
TCP		2		12	24	24		62	$ 9,367.36
Total Labor Hours	0	4	0	24	48	48	0	124	
Contract Rate	$300.17	$264.62	$244.11	$198.51	$152.83	$116.17	$70.30		
TOTAL LABOR COSTS	$0.00	$1,058.48	$0.00	$4,764.24	$7,335.84	$5,576.16	$0.00	$18,735	

Project: Los Fresnos Hike and Bike Trail (2.1 Miles)
County: Cameron County, Texas
From: Los Fresnos

Description of Work: Row Mapping (FC130)/ Design Survey (FC 150)/ SUE Level A Test Holes

TASK AND DESCRIPTION FC 130 Right of Way Mapping, FC 150 Field Surveying, SUE Level A	Sr. RPLS/ Principle	Project RPLS	Sr. Survey Technician	Survey Technician	3-man Survey Crew	2-man Survey Crew	Lidar/UAS Technician	Abstractor	Admin/ Clerical	Total Hours	Cost
HOURLY RATE	$142.15	$112.53	$77.00	$61.60	$160.16	$135.52	$86.24	$59.23	$49.28		
FC-130 Right of Way Mapping (Parcel Count to Be Determined)	*Note FC 130 Cost Not Included in Total Fee- Parcel Count to Be Determined										
I. Parcel Exhibits (Per Parcel Fee)											
A. Exhibits	2	4	8	24		4		4	4	50	$ 3,804.94
B. Title Report (Per Parcel)											$ 500.00
Subtotal Hours	2	4	8	24	0	4	0	4	4	50	
Subtotal Cost	$284.30	$450.12	$616.00	$1,478.40	$0.00	$542.08	$0.00	$236.92	$197.12		$ 4,304.94
FC 150- Design Surveys											
I. Horizontal and Vertical Control											
A. Field 5/8" iron rods with plastic cap set in concrete every 1000'		1	1		24					26	$ 4,033.37
B. RTK- GPS			1	4		8				13	$ 1,407.56
C. Level Loops			1	4		16				21	$ 2,491.72
II. Design Surveys (Field Data Collection, Photogrammetry, Lidar Extraction)											
A. Cross Sections (Roadway and Drainage)			2	2		32	4			40	$ 4,958.80
B. Structures (Irrigation, Drainage, Inverts, Bridges, Resacas)			2	2		8	4			16	$ 1,706.32
C. Utility Investigation			2	2				8	0	12	$ 751.04
D. Abstracting								8	0	8	$ 473.84
E. Field Property corner Recon			4	4		24				32	$ 3,806.88
F. Abstract Map/Base Map	1	4	6	12					0	23	$ 1,793.47
G. ROW Staking	1	2	6	6		16				31	$ 3,367.13
H. Right of Entry									0	0	$ -
I. Aerial Survey/UAS						8	8			16	$ 1,774.08
1. Mobilization (One Time Fee)											$ 500.00
III. Final Report and Deliverables											
A. CADD file (2D & 3D) for limits of project				8					0	8	$ 492.80
B. Final Report and Deliverables	1	1	4	4			4	2	0	16	$ 1,272.50
C. Horizontal/ Vertical Control Sheets	1	1	4	4					0	10	$ 809.08
D. Survey Report	1	4	2	2					24	33	$ 2,052.19
Subtotal Hours	5	13	35	54	24	112	20	18	24	305	
Subtotal Cost	$710.75	$1,462.89	$2,695.00	$3,326.40	$3,843.84	$15,178.24	$1,724.80	$1,066.14	$1,182.72		$ 31,690.78
SUE Level A Test Holes (Est. 10 Per Mile)											
I. Test Holes											
A. Data Collection/ Field Verification		1	24			80		4		109	$ 13,039.05
Subtotal Hours	0	1	24	0	0	80	0	4	0	109	
Subtotal Cost	$0.00	$112.53	$1,848.00	$0.00	$0.00	$10,841.60	$0.00	$236.92	$0.00		$ 13,039.05
Total Fee FC 150 and SUE Level A	$710.75	$1,575.42	$4,543.00	$3,326.40	$3,843.84	$26,019.84	$1,724.80	$1,303.06	$1,182.72	414	$ 44,729.83

SUBCONSULTANT FEE SCHEDULE PAGE 3 OF 6

Los Fresnos Hike and Bike Trail
CCRMA
Millennium Engineers

TASK DESCRIPTION	Unit	Hourly Rate	Estimated Hours	Task Cost
FC 110 - GEOTECHNICAL (ENGINEERING ANALYSIS) PM Hours				
Initial Project Setup	hour	$229.15	2	$ 458.30
Laying out Needed Drilling Scheme & Plan View of Boring Logs	hour	$229.15	2	$ 458.30
2 Project Site Visits	hour	$229.15	16	$ 3,666.40
Coordination of Utilities and Staking Out Boring Locations	hour	$229.15	2	$ 458.30
Coordination and Meetings	hour	$229.15	2	$ 458.30
Preliminary Geotechnical Report, Soil Geology, Site Soils, Analyses, Recs.	hour	$229.15	3	$ 687.45
Structural Evaluation of Borings (Soil Shear Strength Computations)	hour	$229.15	3	$ 687.45
Evaluation of Pavement Criteria	hour	$229.15	3	$ 687.45
Pavement Cycle Analyses	hour	$229.15	3	$ 687.45
Pavement Design Options	hour	$229.15	3	$ 687.45
Pavement Design - HMAC for Locations 1, 2 and 3	hour	$229.15	5	$ 1,145.75
Creation of Final Boring Logs with TCP and Soil Index Testing Data	hour	$229.15	3	$ 687.45
Geotechnical Report, Soil Geology, Site Soils, Analyses, Recs.	hour	$229.15	3	$ 687.45
FC 110 - GEOTECHNICAL (ENGINEERING ANALYSIS) Geotechnical Engineer Hours				
Initial Project Setup	hour	$155.23	8	$ 1,241.84
Laying out Needed Drilling Scheme & Plan View of Boring Logs	hour	$155.23	8	$ 1,241.84
2 Project Site Visits	hour	$155.23	16	$ 2,483.68
Coordination of Utilities and Staking Out Boring Locations	hour	$155.23	8	$ 1,241.84
Coordination and Meetings	hour	$155.23	8	$ 1,241.84
Preliminary Geotechnical Report, Soil Geology, Site Soils, Analyses, Recs.	hour	$155.23	10	$ 1,552.30
Structural Evaluation of Borings (Soil Shear Strength Computations)	hour	$155.23	10	$ 1,552.30
Evaluation of Pavement Criteria	hour	$155.23	10	$ 1,552.30
Pavement Cycle Analyses	hour	$155.23	10	$ 1,552.30
Pavement Design Options	hour	$155.23	10	$ 1,552.30
Pavement Design - HMAC for Locations 1, 2 and 3	hour	$155.23	20	$ 3,104.60
Creation of Final Boring Logs with TCP and Soil Index Testing Data	hour	$155.23	10	$ 1,552.30
Geotechnical Report, Soil Geology, Site Soils, Analyses, Recs.	hour	$155.23	10	$ 1,552.30
FC 110 - GEOTECHNICAL (ENGINEERING ANALYSIS) Admin Hours				
Administrative Hours - Report Preparation and Billing	hour	$73.92	8	$ 591.36
SUB-TOTAL - GEOTECHNICAL ENGINEERING & ANALYSIS			206	$ 35,170.74
TOTAL DIRECT EXPENSES (FROM BELOW)				$ 2,965.60
SUB-TOTAL - GEOTECHNICAL EXPLORATIONS AND LABORATORY TESTING (See Page 2 of 2)				$ 16,284.90
GRAND TOTAL				**$ 54,421.24**

DIRECT EXPENSES	Units	Unit Cost	Quantity	
Mileage	Mile	0.58	320	$ 185.60
PPE (Protective Equipment)	each	250	2	$ 500.00
Mobilization and Demobilization of Drilling Rig (Trips within 100 miles from office to site)	trip	600	1	$ 600.00
Construction Truck	day	125	2	$ 250.00
Shelby Tubes Transportation Box	per box	175	2	$ 350.00
Portable Message Board (Traffic Control)	day	500	2	$ 1,000.00
Geotechnical Report Printing (Estimated at 1 copies) at $80.00 each	Print / Sheet	80	1	$ 80.00
TOTAL DIRECT EXPENSES				$ 2,965.60

14' ROW with a 10' HMAC Hike and Bike Trail

Scope of Work:

total

2.1 miles in

Los Fresnos Hike and Bike Trail
CCRMA
Millennium Engineers

Limits: 0.9 miles west alon drainage canal parallel to Canal St., then 0.7 miles south parallel to Mesquite St., then 0.5 miles east between 10th St. and Arroyo Blvd.

TASK DESCRIPTION	Unit	Fixed Cost	Total Estimated	Task Cost
FC 110 - GEOTECHNICAL (DRILLING AND TESTING)				
LOCATION 1 - North Side of Primera Road (4 Proposed 10ft. Boring)	LF	$40.00	40	$ 1,600.00
LOCATION 2 - Parallel to Mesquite St. Along Drainage Canal Easement (3 Proposed 10ft. Boring)	LF	$35.00	30	$ 1,050.00
LOCATION 3 - Between 10th St. and Arroyo Blvd. (3 Proposed 10ft. Boring)	LF	$35.00	20	$ 700.00
Texas Cone Penetration (Tex-132-E) (2 per bore)	each	$45.00	20	$ 900.00
Standard Penetration Test (SPT) (ASTM1586)	LF	$38.00	45	$ 1,710.00
Concrete/AC Patch ~ Proposed on 10 Pavement Borings	each	$68.00	10	$ 680.00
Field Technician: Collect Samples ~ Estimated at 10 hour days for 3 days of drilling	hour	$33.00	30	$ 990.00
Sample Preparation (Tex-101-E) ~ Proposed for each boring	each	$103.49	10	$ 1,034.90
Moisture Content (Tex-103-E) ~ Proposed on all samples, 2 ft. intervals for upper 10 ft	each	$17.00	50	$ 850.00
Atterburg Limits (Tex-104E) ~ Proposed at 2 per boring for pavements	each	$43.00	20	$ 860.00
Atterburg Limits (Tex-105-E) ~ Proposed at 2 per boring for pavements	each	$43.00	20	$ 860.00
Atterburg Limits (Tex-106-E) ~ Proposed at 2 per boring for pavements	each	$44.00	20	$ 880.00
Percent Passing No. 200 Sieve (Tex-111-E) ~ Proposed at 2 per boring for pavements	each	$61.00	20	$ 1,220.00
Sulfate Content in Soils (Tex-145-E) ~ Proposed at 10 locations on the pavement borings	each	$95.00	10	$ 950.00
Soil-Lime Testing (Tex-121-E)	each	$375.00	10	$ 3,750.00
SUB-TOTAL - GEOTECHNICAL EXPLORATIONS AND LABORATORY TESTING				**$ 16,284.90**

10 bores:
10.00

Proposal
Cultural Resource Investigations
Los Fresnos Hike and Bike Trail
City of Los Fresnos,
Cameron County, Texas

PROJECT DESCRIPTION

GDJ Engineering (GDJ) has requested a scope of work and cost estimate from AmaTerra Environmental, Inc. (AmaTerra) to prepare a cultural resources investigation for the Cameron County Mobility Authority (CCRMA), Los Fresnos Hike and Bike Trail. The proposed trail would be 10-ft in wide, placed within an existing 14-ft wide right-of-way (ROW). The conceptual alignment will start where the previous trail ends on the northeast corner of the City where Retama Street meets the existing trail, and then will head 0.9 miles west past Mesquite Street. The proposed trail will then head 0.7 miles south along the drainage canal easement that bounds the western City limits before turning east 0.5 miles between 10th Street and the drainage canal easement and stopping at Arroyo Boulevard. The depths of impact are unknown. The project will receive federal funds and will be overseen by TxDOT, therefore Section 106 compliance is required.

PROJECT SCOPE

Task 1: Historical Studies

AmaTerra shall prepare a short form Project Coordination Request for Historical Studies Project (PCR) for review and comment by TxDOT-ENV. The PCR shall conform to the TxDOT *PCR Review Standard* (July 2021 Version 6).

Task 3: Archeological Studies

AmaTerra shall prepare an Archeological Background Study (ABS) for review and comment by TxDOT-ENV. The background study will involve review of existing files held by the Texas Archeological Research Laboratory (TARL) and the Texas Historical Commission (THC) to determine if any previously recorded sites or archeological surveys occur within or near the proposed project area. The location of any previously recorded sites and surveys will be plotted onto USGS 7.5-minute topographic maps for use in the compliance coordination process. Archeologists will also consult relevant USDA NRCS soil survey maps, aerial photography, historical maps, land use maps, and the Geologic Atlas of Texas to assess the likelihood for unrecorded archeological resources and make recommendations regarding the need for field survey. The results of this effort will be integrated into a background study report that conforms to TxDOT's *Review Standards for Archeological Background Studies* for review and comment by TxDOT-ENV.

SCHEDULE

To be determined in consultation with Client.

ASSUMPTIONS AND CONDITIONS

The following is a list of assumptions on which the project costs are based. Any work not discussed in the tasks above may be considered outside of this scope and may require a supplemental agreement or fee adjustment. The scope and fee estimate are valid for 9 months after this document's date.

1) Client will provide shapefiles and all GIS mapping to prepare the PCR and Background Studies Report.
2) AmaTerra assumes that there may be up to one design change following the receipt of spatial data for the project, and any additional design changes may warrant a supplemental fee increase.
3) Client will provide project area photographs for the project.
4) AmaTerra assumes one round of comments from the client and the regulatory agency for the reports.
5) Client will submit all documents directly into the TxDOT ECOS.

COMPENSATION

Client will compensate AmaTerra on a time and materials basis (T&M) of **$8,763.00.** AmaTerra will invoice GDJ monthly based on percentage of completion. A cost breakdown is provided below.

COST BREAKDOWN

LABOR	Task 1 PCR	Task 2 Background Studies Report	Admin and Project Mgmt	Total	Unit	Unit Price	Cost
Support Manager	0	0	2	2	hr	$ 289.00	$ 578.00
Quality Manager	1	1	2	4	hr	$ 172.00	$ 688.00
Sr Archaeologist/PI	0	4	0	4	hr	$ 136.00	$ 544.00
Archeologist IV	0	10	0	10	hr	$ 108.00	$ 1,080.00
Senior Historian	16	0	0	16	hr	$ 171.00	$ 2,736.00
Architectural Historian	4	0	0	4	hr	$ 137.00	$ 548.00
Admin/Clerical	2	2	4	8	hr	$ 126.00	$ 1,008.00
GIS Operator	4	8	0	12	hr	$ 131.00	$ 1,572.00
TOTAL LABOR							$ 8,754.00

EXPENSES	Task 1 PCR	Task 2 Background Studies	Admin and Project Mgmt	Total	Unit	Unit Price	Cost
8 1/2 x 11 Copies, b/w	20	20	20	60	each	$ 0.15	$ 9.00
TOTAL EXPENSES							$ 9.00
TOTAL							**$ 8,763.00**

UPRR REMS
Project 800501

REIMBURSEMENT AGREEMENT
PRELIMINARY ENGINEERING SERVICES

Effective Date:

Estimate: $25,000.00

THIS REIMBURSEMENT AGREEMENT (**Agreement**) is made and entered into as of the **Effective Date**, by and between UNION PACIFIC RAILROAD COMPANY, a Delaware corporation (**Railroad**), and CAMERON COUNTY REGIONAL MOBILITY AUTHORITY (**Agency**).

RECITALS

A. Agency desires to initiate the project more particularly described on Exhibit A attached hereto (**Project**).

B. The Project will affect Railroad's track and right of way at or near the Project area more particularly described on Exhibit A.

C. Railroad agrees to collaborate with Agency on the conceptualization and development of the Project in accordance with the terms and conditions of this Agreement.

AGREEMENT

NOW THEREFORE, the parties hereto agree as follows:

1. Railroad, and/or its representatives, at Agency's sole cost and expense, agrees to perform (or shall cause a third-party consultant to perform on Railroad's behalf) the preliminary engineering services work described on Exhibit B attached hereto (**PE Work**). Agency acknowledges and agrees that: (a) Railroad's review of any Project designs, plans and/or specifications, as part of the PE Work, is limited exclusively to potential impacts on existing and future Railroad facilities and operations; (b) Railroad makes no representations or warranties as to the validity, accuracy, legal compliance, or completeness of the PE Work; and (c) Agency's reliance on the PE Work is at Agency's own risk.

2. Notwithstanding the Estimate **(Estimate)**, Agency agrees to reimburse Railroad and/or Railroad's third-party consultant, as applicable, for one hundred percent (100%) of all actual costs and expenses incurred for the PE Work. During the performance of the PE Work, Railroad will provide (and/or will cause its third-party consultant to provide) progressive billing to Agency based on actual costs in connection with the PE Work. Within sixty (60) days after completion of the PE Work, Railroad will submit (and/or will cause its third-party consultant to submit) a final billing to Agency for any balance owed for the PE Work. Agency shall pay Railroad (and/or its third-party consultant, as applicable) within thirty (30) days after Agency's receipt of any progressive and final bills submitted for the PE Work. Bills will be submitted to the Agency using the contact information provided on Exhibit C. Agency's obligation hereunder to reimburse Railroad (and/or its third-party consultant, as applicable) for the PE Work shall apply regardless whether Agency declines to proceed with the Project or Railroad elects not to approve the Project.

3. Agency acknowledges and agrees that Railroad may withhold its approval for the Project for any reason in its sole discretion, including without limitation, impacts to Railroad's safety, facilities, or operations. If Railroad approves the Project, Railroad will continue to work with Agency to develop final plans and specifications, and prepare material and force cost estimates for any Project related work performed by Railroad.

4. If the Project is approved by Railroad, Railroad shall prepare and forward to Agency a Construction and Maintenance Agreement (**C&M Agreement**) which shall provide the terms and conditions for the construction and ongoing maintenance of the Project. Unless otherwise expressly set forth in the C&M Agreement, the construction and maintenance of the Project shall be at no cost to Railroad. No construction work on the Project affecting Railroad's property or operations shall commence until the C&M Agreement is finalized and executed by Agency and Railroad.

5. Neither party shall assign this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld, conditioned, or delayed.

6. No amendment or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties.

7. This Agreement sets forth the entire agreement between the parties regarding the Project and PE Work. To the extent that any terms or provisions of this Agreement regarding the PE Work are inconsistent with the terms or provisions set forth in any existing agreement related to the Project, such terms and provisions shall be deemed superseded by this Agreement to the extent of such inconsistency.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the Effective Date.

CAMERON COUNTY REGIONAL MOBILITY AUTHORITY	**UNION PACIFIC RAILROAD COMPANY,** a Delaware Corporation
_____	_____
Signature	Signature
_____	Erik Lewis
Printed Name	Printed Name
_____	Manager I, Industry & Public Projects
Title	Title

Exhibit A
Project Description and Location

Project Description

Cameron County Regional Mobility Authority proposes to install a 10' shared use pedestrian pathway at both of the existing at-grade crossings referred to below.

Location

Harlingen Subdivision

DOT	Crossing Type	Milepost	Street Name
758338G	Public	20.87	Canal Street
758343D	Public	21.38	West 8th Street

Exhibit B
Scope of Project Services

Scope of work includes, but is not limited to the following

- Field diagnostic(s) and inspections
- Plan, specification, and construction review
- Project design
- Preparation of Project estimate for force account or other work performed by the Railroad
- Meetings and travel

Exhibit C
Billing Contact Information

Name	Eric Davila
Title	Chief Engineer
Address	3461 Carmen Avenue, Ranch Viejo, TX 78575
Work Phone	(956) 621-5573
Cell Phone	
Email	edavila@ccrma.org
Agency Project No.	

UPRR General Cost Estiamate for PE and C&M

Table 11.1 Management and Design Review Costs

PROJECT TYPE	UPRR General Cost Estimates for Project Management/Structure & Design Review								EXAMPLES
	TYPICAL				COMPLEX				
	Prelim Eng / Design Phase	+	C&M/Project / Construction Phase	<--Agreement Type / TOTAL	Prelim Eng / Design Phase	+	C&M/Project / Construction Phase	<--Agreement Type / TOTAL	
Railroad Warning Devices	$25,000	+	$30,000	$55,000	$50,000	+	$75,000	$125,000	**Typical –** Standard installation of Railroad Warning Devices, no roadway changes **Complex –** Signal Preemption/ Interconnect, Road reconfiguration, Multiple agencies, Four Quad Gates
Railroad Crossing Surface	$10,000	+	$15,000	$25,000	$15,000	+	$15,000	$30,000	**Typical –** Standard installation of Railroad track and concrete crossing surface **Complex –** Regulatory Agency or DOT Order Required
General Maintenance At Grade Crossing Roadway Work	$5,000	+	$10,000	$15,000	$10,000	+	$10,000	$20,000	**Typical –** General chip and seal, review of roadway work, signing & striping **Complex –** Regulatory Agency or DOT Order Required
General Maintenance Bridge Roadway Work	$25,000	+	$25,000	$50,000	$50,000	+	$50,000	$100,000	**Typical –** Barrier Rail & Fence repair/ renewal **Complex –** Deck Reconstruction, Railroad Inner Guardrail, Pier Protection
Grade Separation (RR Under)	$25,000	+	$50,000	$75,000	$200,000	+	$200,000	$400,000	**Typical –** Spans Railroad ROW (Follows Grade Separation Guidelines) **Complex –** Crosses a yard, extensive construction phasing required, shoofly, inner
Grade Separation (RR Over)	$75,000	+	$125,000	$200,000	$450,000	+	$400,000	$850,000	**Typical –** Single lane bike trail tunnel, no track work **Complex –** Crosses a yard, extensive construction phasing required, shoofly
Levee/Floodwalls	$50,000	+	$75,000	$125,000	$225,000	+	$350,000	$575,000	**Typical –** Levee maintenance near industrial tracks **Complex –** New levees and floodwalls affecting mainline tracks, encroaching ROW, yards involved.