EXHIBIT "E"
HIDALGO COUNTY
Professional Engineering Services
Agreement # C-21-0833-03-08

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the **Professional Engineering Services** Agreement No. C-21-0833-03-08, incorporated herein by reference, for the **"Traffic Engineering Consulting and Other Services – New Hidalgo County Courthouse"** made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and **CONSOR Engineers, LLC**, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the Engineer to **develop and complete a Traffic Impact Analysis of the current and future traffic impacts around the New Hidalgo County Courthouse, which addition will include a detailed final report.**

The **Engineer** is to provide the scope of Services as required by the Agreement with Owner.

The scope of services to be provided by the **Engineer** is identified in **Attachment "A" –** *Scope of Services to be provided by Engineer"* attached hereto and incorporated by reference.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$ 59,291.00**.This amount is based upon the costs outlined in the **Attachment "B" –***"Fee Schedule"* attached hereto and incorporated by reference.

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the **Professional Engineering Services** Agreement No. C-21-0833-03-08 between the **Owner** and the **Engineer**.

PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source:
Account No. _____
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of the scopes of the Work Authorization, within the limits of Agreement No. C-21-0833-03-08, provided in this Work Authorization; or on (_____)**. ***If applicable***: Engineer shall conform to the approved

"Work/Project Schedule", attached hereto and incorporated by reference herein as **Attachment "C"**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement No. C-21-0833-03-08**.

PART 7. ACCEPTANCE AND APPROVAL
This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on **03/08/22** as indicated below and effective as of **08th** day of **March 2022**.

EXECUTED as of the day and year first written above.

APPROVED BY COMMISSIONERS' COURT ON MARCH 08, 2022.

Agenda Item No. _____ **Executive Office: _____**

ENGINEER:
CONSOR Engineers, LLC

_____
Zina Schwartz, PE, Executive Vice President

COUNTY:
COUNTY OF HIDALGO

ATTEST:

_____
Hon. Richard F. Cortez, County Judge

_____
Arturo Guajardo, Jr., County Clerk

ATTACHMENTS:

SUPPLEMENTAL SIGNATURES:
(If applicable)

Attachment "A" – *Scope of Services to be provided by Engineer*
Attachment "B" – *Fee Schedule*
Attachment "C"– *Approved Work/Project Schedule*

Attachment A

Project Specific Scope of
Services to be provided
by Engineer

Contract C-21-0833-03-08

EXHIBIT C
SCOPE OF SERVICES TO BE PROVIDED BY ENGINEER

The work to be performed by the Engineer shall consist of providing traffic engineering consulting services for the new Hidalgo County Courthouse in the city of Edinburg. The Engineer will be responsible for the development and completion of a Traffic Impact Analysis to assess current and future traffic impacts resulting from traffic circulation changes around the courthouse and construction of the new courthouse facilities. The Engineer will perform the traffic impact analysis for two options as described in the scope of services below.

Background

A traffic study completed in December of 2017 evaluated existing traffic conditions around the courthouse square and major intersections within a one-mile radius. This study recommended the conversion of traffic flow around the new courthouse to one-way flow counterclockwise. This recommendation has now been advanced to the design phase. The design project is a local government sponsored project developed by Hidalgo County Precinct 2. Because the streets surrounding the square are state roads, the project is being developed with state and federal funds, with TxDOT oversight. The project includes the reconstruction of SH 107 from the courthouse to I-69C. The goals of this project are to improve mobility and safety and reduce congestion. Construction is scheduled to begin in the summer of 2023.

The traffic impact study under this contract will build on the 2017 study, cover items that were not covered by the 2017 study and update the analysis for changes that occurred to the traffic access plans for the new county courthouse. This study will also make updates relative to the most notable traffic circulation change since the 2017 study (the closure of Closner Blvd from McIntyre St to Cano St for the construction of the new courthouse).

Design Standards. The ENGINEER shall prepare all work in accordance with the latest version of applicable STATE procedures, manuals, and guidelines to include the *Texas Manual on Uniform Traffic Control Devices (TMUTCD)*, *Transportation Research Board (TRB) Highway Capacity Manual, Trip Generation Manual, Parking Generation Manual, Traffic Signals Manual*, and other STATE approved manuals.

Scope of Services

Option 1

Option 1 will focus the analysis on proposed driveways to the new courthouse complex:

- New Hidalgo County Courthouse - Sally Port Entrance/Exit
- New Hidalgo County Courthouse - Judiciary Entrance/Exit

The Engineer will perform the following tasks for Option 1:

Analyze ingress/egress to/from the Sally Port Entrance/Exit and the Judiciary Entrance/Exit. Traffic demand for these driveways will be obtained and the analysis will include:

a) The expected Level of Service for the driveways relative to traffic volumes on the street and the proposed traffic circulation changes around the courthouse
b) Review of available intersection sight distance for vehicles exiting the driveways
c) Anticipated vehicular queuing at driveway(s) with access control points, if applicable.
d) Recommendations to maintain acceptable levels of service and safety at the driveways
e) Coordination with the county, city and TxDOT

Option 2

Option 2 will focus the analysis on the intersections surrounding the courthouse which will define our study area:

- Cano St (East & West)
- 10th Ave (North & South)
- 12th Ave (North & South)
- McIntyre St (East & West)
- SH 107

The Engineer will perform the following tasks:

A. Data collection

a) The Engineer shall collect turning movement count data (TMCs) at the intersections listed below, on a typical weekday during the morning, midday, and afternoon peak periods. The counts will include pedestrian activity. Peak hour turning movement counts will be obtained at the following intersections:

1. W. McIntyre Street at N. 10th Ave.
2. W. McIntyre Street at N. Closner Blvd.
3. E. McIntyre Street at N. 12th Ave.
4. W. University Dr (SH 107) at S. 10th Ave.
5. E. University Dr (SH 107) at S. 12th Ave.
6. W. Cano Street at S. 10th Ave.
7. W. Cano Street at S. Closner Blvd.
8. E. Cano Street at S. 12th Street

The count periods shall be as follows:

- 7-9 AM
- 11 AM -1 PM
- 4-6 PM

These counts shall reflect the new traffic circulation patterns after the closure of Closner Blvd for the construction of the new courthouse. The Engineer shall analyze the counts for the new patterns and prepare tabular summaries for each intersection TMC. The Engineer shall determine the peak hour factors for all the turning movement data collected and submitted in a tabular form. The Engineer shall also present the peak hour turning movement data in map format.

b) The Engineer shall perform a site visit to gather intersection and signal inventory data and take photographs. The intersection data will include the number of lanes and lane use, posted speed limit on each approach, bus stop locations, designated crosswalks, and parking near the intersection. The signal inventory will include signal head types, left turn signal type, overlap movements, vehicle detection, pedestrian detection, and pedestrian signals.

B. Review of Previous Reports

The Engineer will review the following reports and documents:

- The 2017 report prepared by ETSI, entitled "Traffic Impact Analysis for the Proposed Hidalgo County Courthouse in the City of Edinburg, Hidalgo County, Texas"
- The "Reduced Hidalgo County Courthouse Traffic Control Plans" by ETSI, dated September 2018
- Schematic plan for the proposed one-way circulation around the courthouse
- Updated plans for the new courthouse driveways and circulation
- TxDOT's plans for the upcoming SH 107 roadway improvements
- The city of Edinburg's plans for the new parking garage.

C. Analysis

The Engineer shall perform the following tasks:

a) Review and assess existing vehicular, pedestrian, and parking demand in the study area

b) Review and assess anticipated vehicular, pedestrian, and parking demand in the study area

c) Review and assess the impacts of the Closner Blvd road closure

d) Identify potential adverse traffic impacts to the existing area street network around the New Hidalgo County Courthouse relative to the proposed traffic circulations changes.

e) Identify transportation improvements which would mitigate potential adverse traffic impacts to mobility within the study area.

f) Assist Hidalgo County in identifying improvement opportunities for traffic controls, roadway capacity improvements, pedestrian facilities (crosswalks, curb ramps, sidewalks, parking facilities, transit bus stops, fire station operations, and other elements as they relate to safe traffic operations.

g) Coordinate with Texas Department of Transportation (TxDOT) and/or any other required government entities as necessary.

h) Perform capacity analysis at each intersection to evaluate the existing timings and to determine the saturation flow rates and the existing Level of Service (LOS). The Engineer shall perform Synchro optimization analysis using the existing volumes to determine the best cycle length for each peak period. The Engineer shall summarize these results in a tabular and graphical format. Determining the best cycle length may require coordination with crossing arterials that are in existing systems.

D. Preliminary Report

a) The Engineer shall prepare a preliminary report to summarize the data collection, capacity/LOS analysis, and recommendations. The Preliminary Report shall be submitted by e-mail in PDF format.

b) The Engineer shall meet with County staff for a technical review meeting. The Engineer shall discuss the analysis and the recommendations, as well as the time frame for implementation. The Engineer shall incorporate the review comments from this meeting into the Final Report.

E. Final Report

The Engineer shall prepare a final report to document the traffic impact study. The Final Report shall consist of:

- The methodology used, the alternatives considered, and the recommendations of the Engineer
- photographs of each intersection
- turning movement counts in tabular format
- turning movement counts in map format
- summary of coordination with county, city, TxDOT and other stake holders.

F. Project Coordination

a) The Engineer shall prepare for and attend a virtual or in person project kick-off meeting, and one in-progress project meeting during the study. The Engineer shall prepare for and attend a second meeting to present the recommendations to the County. The Engineer shall prepare meeting agendas and meeting minutes for all meetings.

b) The Engineer shall prepare invoices and progress reports monthly and advise the County on any issues that may impact the project budget or schedule.

G. Deliverables

The Engineer shall submit the following deliverables:

- the Final Report in printed form.
- a CD-ROM containing the final report, all technical data, and Synchro files.

H. Additional Services

The Engineer shall perform additional services only if requested in writing by the County. These services may include, but not be limited to:

- Design services for the proposed improvements
- Assist Hidalgo County with providing responses to RFI's received
- Assist Hidalgo County with the planning, inspecting, and managing of the construction/implementation phase.

The Engineer will prepare separate fee estimates for the performance of these additional services at the request of the Hidalgo County.

Attachment B

Fee Schedule

FEE SCHEDULE

The proposed fee is a lump sum amount of $59,291.00, broken down by task as follows:

Task	Fee
Option 1	
• Analysis of Proposed Driveways	$9,720
Option 1 Subtotal	**$9,720**
Option 2	
• Data Collection	$10,831
• Review of Previous Reports & Plans	$3,209
• Analysis	$19,597
• Preliminary Report	$5,941
• Review by Hidalgo County	-
• Final Report	$2,800
• Project Coordination	$5,258
• Deliverables	$1,935
Option 2 Subtotal	**$49,571**
Total Fee (Option 1 and Option 2)	**$59,291**

Attachment C

Approved Work/
Project Schedule

WORK SCHEDULE

Task	Duration (Weeks)	Completion Date
Proposal Submittal		February 16, 2022
Proposal Review/Approval	4	March 15, 2022
Notice to Proceed		March 15, 2022
Option 1		
• Analysis of Proposed Driveways	2	March 29, 2022
Option 2		
• Data Collection	1	March 22, 2022
• Review of Previous Reports	1	March 22, 2022
• Analysis, Preliminary Report, Review by County	1	March 29, 2022
• Final Report, Project Coordination, Deliverables	1	March 29, 2022