STRUCTURAL ENGINEERING ASSOCIATES
A JMT COMPANY

Excellence in Structural Design Since 1976
TEXAS REGISTERED ENGINEERING FIRM F-199

November 6, 2025 (ORIGINAL)
December 10, 2025 (SUPPLEMENTAL)

Mr. Eliud De Los Santos, P.E.
City Engineer
City of Laredo
1110 Houston Street
Laredo, Texas 78040

RE: Professional Services Amendment No. 6 Request
World Trade International Bridge Expansion Project
JMT Job No. 21-195C0-001

Dear Mr. De Los Santos,

Johnson, Mirmiran & Thompson, Inc. (JMT) is pleased to submit this request for additional Professional Services for the above captioned international bridge project. This request for additional services is being requested to extend some original services already included within our contract, but also to add services that relate to the project development of the Donation Acceptance Program Project, and other new services that have arisen during the NEPA clearance and design development of this project.

The additional services included within the original portion of this request are the result of changes or new services as requested by the U.S. International Boundary and Water Commission, U.S. Customs and Border Protection Security Design Guidelines for Closed Circuit Television requirements, and the need to add coordination and design services to implement the installation of new Multi-Energy Portal Pre-Read Lane equipment

The proposed original scope of services and associated fee amount for the additional services, as previously submitted on November 6, 2025, are summarized below, and as detailed in the attached documentation:

9A) ADDITIONAL SURVEYING SERVICES	$ 33,500.00
9B) MULTIPLE HEC-RAS STUDIES/REPORTS	$ 38,700.00
10A) ADDITION & REMOVAL OF MSE WALL	$ 16,900.00
10B) EROSION AND BANK STABILIZATION	$ 4,700.00
10C) SPECIAL POE TIE-IN SECURITY FEATURES	$ 98,185.00
10D) DAP COORDINATION & DESIGN	$ 44,220.00
10E) MEP LANES COORDINATION & DESIGN	$ 30,340.00
11) ADD'L OVERALL PROJECT MANAGEMENT	$ 33,030.00
TOTAL FEE REQUESTED IN AMENDMENT # 6 - ORIGINAL	**$ 299,575.00**

The additional services included within the supplemental portion of this request are the result of very recent changes or new services as required to accommodate requested revisions by the Mexican Sponsor to the new northbound bridge, to create a financial feasibility study for evaluation of a potential noise abatement wall, and for extended revisions and cross-border coordination of the conceptual IBWC submittal for this project .

The proposed supplemental scope of services and associated fee amount for the additional services, being added as supplemental on December 10, 2025, are summarized below, and as detailed in the attached documentation:

10F) REVISE CONST. PLANS FOR MEXICO REQUESTED PGL REVISIONS	$ 57,736.00
10G) PREPARE FINANCIAL FEASIBILITY STUDY FOR POTENTIAL NOISE ABATEMENT WALL	$ 20,160.00
10H) REVISIONS TO CONCEPTUAL BRIDGE PLANS FOR PGL REVISIONS	$ 7,476.00
10I) ADD'L HEC-RAS COORDINATION WITH SUMA AND SEA/KCI	$ 12,400.00
11) ADD'L OVERALL PROJECT MANAGEMENT	$ 9,180.00
TOTAL FEE REQUESTED IN AMENDMENT # 6 - SUPPLEMENTAL	**$ 106,952.00**

In summary the total request for this Amendment No. 6 is $406,527.00. This additional services request includes scope and fee amounts for SEA/JMT, JMT IT Division staff for the design of the required CCTV equipment, and our subconsultant KCI.

We greatly appreciate your prompt attention and review of this request, and are hoping that it can be considered and approved by the City as soon as possible. Please feel free to contact me at our office in San Antonio.

Sincerely,

SEA, A JMT Company

Sidney A. Mielke, P.E.
Senior Project Manager

SAM/sam
Attachments: SEA Outline of Scope of Additional Profeesional Services
SEA Fee Proposal Tabulation (Original and Supplemental)
JMT IT Division and KCI detailed scope and fee proposals (Original and Supplemental)

Cc: David T. Covarrubias, P.E., Principal
Martin R. Covarrubias, P.E., Senior Project Manager
Gloria Saavedra, P.E., Civil Engineer II
Elsa Hinojosa, Bridge System Director
Kent Richard, Bridge System Assistant Director

WORLD TRADE INTERNATIONAL BRIDGE EXPANSION PROJECT

AMENDMENT NO. 6 REQUEST
OUTLINE OF SCOPE OF ADDITIONAL PROFESSIONAL SERVICES

ITEM 9) ADDITIONAL SERVICES FOR PRELIMINARY ENGINEERING & DESIGNS FOR PERMITS -ORIGINAL

The SEA Team currently approved scope of services includes an item entitled "3A) Preliminary Engineering & Design for Permits." During the performance of the original scope of services, a significant amount of additional work has been required to advance the preliminary/conceptual design for the bridges and the flood study as a result of coordination with Mexico's engineering consultant (SUMA) and as requested by U.S. International Boundary and Water Commission (USIBWC) and for the purposes of coordinating with the adjacent property owners consultant (FASKEN).

9A) ADDITIONAL SURVEYING SERVICES

The SEA Team chose to coordinate surveying activities with SUMA at the very start of the project, and to prevent delays to the project decided to perform all of the survey data compilation and translation. The Mexican surveyors utilized a totally different set of control datum as opposed to the Texas State Plan Coordinate System, which required a significant amount of further translation of data files to compile a full set of cross-sectional data necessary for input into the proposed HEC-RAS model.

The result of the final translation and compilation was a set of cross-sectional and bridge profile grade line data that was agreed upon by both consultants. This compiled set of survey information has formed the basis for the horizontal and vertical alignment for both bridges on this project as well as a complete set of river cross sections necessary for use in the HEC-RAS models. However, this effort required significantly more time spent with the translation and coordination of the raw Mexican data than was originally included in the approved scope of services.

Additionally, the adjacent property owners, the Fasken Group, operates an irrigation system drawing water from the Rio Grande River which is used for landscape irrigation at the various warehouses and commercial buildings nearby the WTB. The water being utilized from the river is via a "grandfathered" permit and termination of the water draw would also terminate the permit which is not desired by the Fasken Group. During early phases of the preliminary engineering and surveying for the project it was determined that the existing irrigation system would conflict at multiple locations of the proposed new northbound international bridge, and the existing lift station where the pumps were located would be under the proposed new northbound bridge. Maintenance of the pumps, being under a bridge, would not be possible.

Therefore, the SEA Team has spent more surveying efforts determining physically where the existing irrigation system was located, where the system could best be located, and coordinating this information with the overall survey data for the proposed new northbound international bridge. Further detailed description of the additional services can be found in KCI's request for additional services which is attached to this request.

9B) Multiple HEC-RAS Flood Studies and Reports

The SEA Team requested and received a base 1-dimensional (1D) HEC-RAS flood model from USIBWC at the beginning of the project. The SEA Team has taken this base model and created two additional 1D HEC-RAS models from it. These two models, entitled a "corrective effective model" which updates the base model with updated current survey and terrain information, and a "proposed model" which includes the insertion of the proposed new northbound bridge and the expansion of the existing bridge into the model file. Both were submitted to USIBWC for review and comment.

The USIBWC returned comments including the requirement to create and submit a 2D HEC-RAS model. There was no currently existing base 2D HEC-RAS model for this area of the Rio Grande River. The creation of a 2D model required gathering of LIDAR survey data for tributaries and other water storage features both upstream and downstream of the proposed bridges and for both sides of the Rio Grande River. The US side data was relatively easy to locate and correlate for the 2D model, but the LIDAR data for the Mexican side of the river was not readily available, nor could USIBWC furnish any such data. The SEA Team was able to locate what information was available for the Mexican side, and like the survey data, a significant amount of time and effort was required to convert it to usable units that could be inserted into the 2D model.

The result of this extended effort was the creation of 3 new 2D HEC-RAS models. A base model to compare to USIBWC's 1D base model, and new "corrected effective" and "proposed" models that would replace their previously submitted 1D counterparts. All three 2D models have been created and submitted to USIBWC for review and comment in mid-October 2025, and the SEA Team is awaiting comments.

However, the preparation, review, calibration, and translation of the U.S. and Mexican data required for input into the 2D model has required significantly more time and effort than was included in the currently approved contract. Further detailed description of the additional services can be found in KCI's request for additional services which is attached to this request.

ITEM 10) ADDITIONAL SERVICES FOR PLANS SPECIFICATIONS AND ESTIMATE - ORIGINAL

The SEA Team currently approved scope of services includes an item entitled "5) Plans, Specifications and Estimate. During the performance of the original scope of services, a significant amount of additional work has been required to revise and continue to advance the project design to account for changing conditions that were not apparent during the development of the original scope of services.

10A) Addition and Removal of MSE Wall and Embankment Modifications

During the Value Engineering Phase of the project, the SEA Team agreed to modify the layout of the new northbound international bridge to remove one span and include a mechanically stabilized earth (MSE) retaining wall at the new abutment location, as a cost saving revision to the existing bridge layout. However, the geotechnical engineering report determined that the existing soils in the flood plain could not support this tall embankment fill and MSE wall. Significant existing subgrade improvements would be required to provide the amount of support necessary. It was determined that deleting the proposed MSE wall and adding back the previously deleted span was the most cost-effective way to proceed with the new northbound bridge design. This design revision was done between the 60% and 90% PS&E submittals to TxDOT and thus required quite a few revisions to the previously prepared PS&E documents, to delete the MSE wall and revise the proposed embankment cross sections.

10B) Erosion Repair and Bank Stabilization

The City of Laredo Engineering Department requested that the SEA Team add erosion repair and riverbank stabilization methods, under the existing bridge, after the original scope of services was approved. This erosion problem has apparently been a long-term ongoing problem under the existing bridge with several attempts made to repair the erosion and contain future erosion. The SEA Team worked with the City of Laredo Engineering Department to develop long-term bank stabilization methods that could be implemented during the Phase 3 Bridge Repair Phase on the existing bridge, but also implemented on the riverbank under the new northbound bridge. These study and engineering efforts required additional time and effort that was not included within the original approved scope of work for the project.

10C) Special POE Tie-in Security Features

Once full coordination for the DAP project was initiated, CBP released a copy of the current CBP POE Design Guide that detailed current requirements for the POE security features, CCTV security surveillance, POE lighting level requirements and other security related items. Also, the need to create a temporary interior secure perimeter fence with traffic barrier was identified in order to allow the construction of Phase 1 of the project to proceed without interrupting the regular flow of traffic within the POE. The SEA Team has been required to change some existing designs in order to meet the current design guide requirements and meet the security requirements during phased construction.

The requirement to maintain a secure perimeter during Phase 1 construction required modification to existing standard fencing details, creating a new temporary security fence/portable concrete traffic barrier, to prepare new rolling gate designs, and review proposed

drainage plans. Also, CBP required CCTV equipment and additional review and design of roadway lighting to be added to the project to monitor this new gate at the POE along with the traffic flow on the new northbound bridge.

10D) Donation Acceptance Program (DAP) Coordination and Additional Design

The SEA Team was able to assist the City of Laredo with the drafting, review and acceptance of the Donation Acceptance Program (DAP) Application and preliminary coordination with originally approved scope of services items. However, to gain final approval to move forward with construction of the various components of the DAP Project, significant further scope of services for coordination, additional plan development, and plan revisions have been required.

The SEA Team will be required to extract and submit selected plan sheets for the TxDOT PS&E plan set for separate review by the federal DAP team, at the 30%, 60% and 100% review levels. The SEA Team is also required to add in the required new CCTV requirements, rolling gate details, and attend multiple DAP project coordination meetings. All these new requirements and additional scope of services were not included in the original approved scope of services.

10E) MEP System Coordination & Design

CBP constructed new MEP units and the associated pre-read lanes for these units within the active port-of-entry, after the original design scope and fee for this project was approved. A plan of action was developed for the original PS&E development that included the design for including eight MEP pre-read lanes to be constructed during Phase 1 construction of this project. This original layout for the 8 MEP pre-read lanes along with the associated fencing, gates, lighting and drainage was developed through the 30%, 60%, 90% and 100% PS&E submittals.

In mid-October 2025, the headquarters of CBP NII Division granted permission and instructed that the MEP pre-read lane equipment be shifted to a location immediately in front of the existing MEP units. While this reduced the required number of pre-read equipment lanes from 8 to 4, it also required the SEA Team to revise the 100% PS&E submittal to remove the noted equipment, revise the secure fence alignment, and re-design the rolling gates. These late project changes created additional scope of services not previously anticipated; however, this revision will allow for significantly improved commercial vehicle inspection throughput in the final completed project.

This revision to the location of the MEP pre-read equipment, also created the requirement for a separate construction contract between the City of Laredo and the MEP equipment vendor RapiScan, for the installation of the new pre-read lanes equipment within the active port of entry, and with special construction crews. The SEA Team will be required to provide additional coordination and existing PS&E revisions to accommodate this change.

ITEM 10) ADDITIONAL SERVICES FOR PLANS SPECIFICATIONS AND ESTIMATE - SUPPLEMENTAL

The SEA Team currently approved scope of services includes an item entitled "5) Plans, Specifications and Estimate. During the performance of the original scope of services, a significant amount of additional work has been required to revise and continue to advance the project design to account for changing conditions that were not apparent during the development of the original scope of services.

10F) Revise Construction Plans (PS&E) for Mexico PGL Requested Revisions

While the Mexican engineering consultant, SUMA, was undergoing review of the new international bridge plans with the Mexican department of transportation (SICT), revisions to the vertical profile gradient line (PGL) were approved by the SICT. This review and approval took more than six (6) months and thus SUMA requested that the US sponsor and engineering consultant consider altering the vertical PGL for the new northbound bridge to prevent significant delays to the project. After further discussion, a compromise revised vertical PGL was agreed upon, which SUMA believed would be acceptable to SICT, and which still met all design guidelines for AASHTO and TxDOT. However, to implement the agreed upon compromise vertical PGL both engineering consultants will be required to perform revisions to their respective construction plans.

10G) Prepare Feasibility Study for Potential Noise Abatement Wall

During development of the project environmental clearance document, the noise analysis study revealed that there were multiple noise receptors along Fasken Blvd. and adjacent to the existing commercial pre-primary lanes, that experienced noise levels that exceeded the maximum criteria established by U.S. design guidelines. The noise study further developed a proposed noise abatement wall that could be constructed parallel to the commercial pre-primary lanes that reduced the noise levels at the identified receptors below the maximum criteria. According to established design criteria, the next step is to determine the financial feasibility of constructing the proposed noise abatement wall. A Feasibility Study will be prepared which will include the preparation of a schematic design plan and elevation for the proposed wall as identified and then develop a reasonable opinion of probable cost to construct the proposed wall, but also include any required utility adjustments, right-of-way acquisition, and associated project construction costs. This information is then utilized per current procedures and a determination of financial feasibility of the proposed wall is established. This financial feasibility is considered in conjunction with the previously identified noise levels, and a determination is made to continue with the design and construction, or deem the wall is not feasible based upon all criteria.

10H) Revisions to Conceptual Bridge Plans Due to Revised PGL

In addition to revisions required to the construction plans package (PS&E), the compromise agreement to alter the vertical PGL for the project will require revisions to the separate Conceptual Bridge Plans that are required for submittal for review and approval by USIBWC.

10I) Additional HEC-RAS Coordination Efforts Between SUMA and SEA/KCI
The U.S. and Mexican engineering consultants spent the anticipated amount of time to prepare and coordinate the development of the original 1D HEC-RAS Flood Study, one for review by both sections of the IBWC. Because of the months required to revise the HEC-RAS Flood Study from a 1D format to a 2D format as required by USIBWC, there will be a second period of review and coordination between the engineering consultants for each project sponsor, to obtain the mandatory "conceptual" project approvals.

ITEM 11) ADDITIONAL OVERALL PROJECT MANAGEMENT – ORIGINAL AND SUPPLEMENTAL
The SEA Team currently approved scope of services includes an item entitled "4A) Overall Project Management. An additional amount to cover administration and overall project coordination functions for all of the noted requested additional services, both labeled original and supplemental, is also a part of this request. This amount will be added and billed as a part of the original line item 4A) Overall Project Management.

REQUESTED ADDITIONAL SERVICES FEE AMOUNTS - ORIGINAL
SEA is requesting the following total amounts for the line items identified above:

- Item 9A) Additional Surveying Services	$ 33,500.00
- Item 9B) Multiple HEC-RAS Studies/Reports	$ 38,700.00
- Item 10A) Addition & Removal of MSE Wall	$ 16,900.00
- Item 10B) Erosion & Bank Stabilization	$ 4,700.00
- Item 10C) Special POE Tie-in Security Features	$ 98,185.00
- Item 10D) DAP Coordination & Design	$ 44,220.00
- Item 10E) MEP Lanes Coordination & Design	$ 30,340.00
- Item 11) Additional Overall Project Management	$ 33,030.00
Total Amendment # 6 Fee Request - ORIGINAL	**$ 299,575.00**

REQUESTED ADDITIONAL SERVICES FEE AMOUNTS - SUPPLEMENTAL
SEA is requesting the following total amounts for the line items identified above:

- Item 10F) Revise Construction Plans (PS&E) for Mexico PGL Requested Revisions	$ 57,736.00
- Item 10G) Prepare Feasibility Study for Potential Noise Abatement Wall	$ 20,160.00
- Item 10H) Revisions to Conceptual Bridge Plans Due to Revised Vertical PGL	$ 7,476.00
- Item 10I) Additional HEC-RAS Coordination Efforts Between SUMA and SEA/KCI	$ 12,400.00
- Item 11) Additional Overall Project Management	$ 9,180.00
Total Amendment # 6 Fee Request - SUPPLEMENTAL	**$ 106,952.00**

PAYMENT METHODS FOR REQUESTED ADDITIONAL PROFESSIONAL SERVICES:

SEA requests that these additional services line-item amounts, except for item 11) Overall Project Management be paid as LUMP SUM payment items. Payment for these items will not be exceeded, except as provided for in the Contract for Services.

The fee for item 11) Overall Project Management is being submitted as a budget item only, and not to be exceeded without prior approval by the City of Laredo. This is the same billing and payment method currently in place for the previous Overall Project Management amounts, and billing for this item will remain as actual hours and expenses basis.

TIME FOR COMPLETION OF THIS ADDITIONAL SCOPE OF SERVICES

The SEA Team will make every attempt to perform this additional scope of services within the currently established Overall Project Schedule. Some adjustments may be required to the actual bid date to obtain final DAP project component approval from the U.S. Government agencies.

A JMT DIVISION

FEE PROPOSAL TABULATION
FOR PROFESSIONAL SERVICES CONTRACT
AMENDMENT NO.6

CITY OF LAREDO, TEXAS
WORLD TRADE INTERNATIONAL BRIDGE EXPANSION PROJECT

06-Nov-25

Task Description	Project Manager	Sr. Stuctural Engineer	Structural Engineer	Jr. Eng'r/ EIT	CADD Operator	KCI Amount	SEA/JMT CCTV	Total Hours	Total Fee
9A) ADDITIONAL SUREVEYING SERVICES						$33,500.00		0	$33,500.00
9B) MULTIPLE HEC-RAS STUDIES/REPORTS						$38,700.00		0	$38,700.00
10A) *ADDITION & REMOVAL OF MSE WALL*						$16,900.00		0	$16,900.00
10B) EROSION & BANK STABILIZATION						$4,700.00		0	$4,700.00
10C) SPECIAL POE TIE- IN SECURITY FEATURES	40		20			$13,800.00	$71,845.00	60	$98,185.00
10D) DAP COORDINATION & DESIGN	80		20			$22,500.00		100	$44,220.00
10E) MEP LANES COORDINATION & DESIGN	40		20			$17,800.00		60	$30,340.00
11) ADD'L OVERALL PROJECT MANAGEMENT	100		60					160	$33,030.00
PROJECT TOTALS	260	0	120	0	0	$147,900.00	$71,845.00	380	$299,575.00
Hourly Rates	$229.50	$223.50	$168.00	$112.00	$102.00				

****** REFER TO SCOPE OF WORK EXCLUSIONS***

A JMT DIVISION

FEE PROPOSAL TABULATION
FOR PROFESSIONAL SERVICES CONTRACT
AMENDMENT NO.6 (SUPPLEMENTAL)

CITY OF LAREDO, TEXAS
WORLD TRADE INTERNATIONAL BRIDGE EXPANSION PROJECT

12-Dec-25

Task Description	Project Manager	Sr. Stuctural Engineer	Structural Engineer	Jr. Eng'r/ EIT	CADD Operator	KCI Amount	SEA/JMT CCTV	Total Hours	Total Fee
10F) REVISE PLANS FOR MEXICO PGL REQUESTED REVISIONS	8	80	120		80	$9,700.00		9988	$57,736.00
10G) PREPARE FEASIBILITY STUDY FOR POTENTIAL NOISE ABATEMENT WALL	8	24	48		48			128	$20,160.00
10H) *REVISIONS TO CONCEPTUAL BRIDGE* BRIDGE PLANS DUE TO REVISED PGL	4	4	24		16			48	$7,476.00
10I) ADD'L HEC-RAS COORDINATION EFFORTS BETWEEN SUMA AND SEA/KCI						$12,400.00		0	$12,400.00
								0	$0.00
								0	$0.00
								0	$0.00
11) ADD'L OVERALL PROJECT MANAGEMENT	40							40	$9,180.00
PROJECT TOTALS	60	108	192	0	144	$22,100.00	$0.00	10,204	$106,952.00
Hourly Rates	$229.50	$223.50	$168.00	$112.00	$102.00				

****** REFER TO SCOPE OF WORK EXCLUSIONS***

Laredo Bridge Crossing CCTV Surveillance/Access Control: Scope of Services

Project Understanding

JMT Traffic/ITS will coordinate with the JMT SEA Texas office to prepare design plans and specifications for the design of CCTV camera coverage for both surveillance and access control of the proposed new bridge crossing of the Rio Grande River at the World Trade Bridge in Laredo, Texas.

The current CCTV camera surveillance and access control system at the existing World Trade Bridge will remain. The proposed CCTV system for the new bridge will be designed with a new communications connection (fiber optic) to the existing operations building where the existing CCTV system is monitored.

Design Activities

JMT will prepare preliminary and final design plans for the construction of the proposed CCTV camera surveillance and access control system at the new bridge crossing at the World Trade Bridge, in accordance with TxDOT Standards and TxDOT Specifications for Traffic/ITS/Electrical. The design team will develop full plans, specifications and estimates (PS & E) for the construction of the proposed CCTV cameras, as well as communications system details (fiber optic cable and splicing) for a proposed connection/tie-in with the existing surveillance/monitoring system at the existing operations center. Tasks include:

Task 1. Preliminary Design

Preliminary CCTV Design plans will be prepared utilizing the project CAD design files for base mapping. The preliminary design plans will show the proposed CCTV camera locations, proposed cabinet locations, proposed underground electrical and communications conduit and junction box systems.

JMT will coordinate with the City of Laredo and the US Customs and Border Protection to obtain existing as-built plans/information of the existing CCTV camera surveillance and access control system at the operations/monitoring building. This coordination is necessary to determine:

- the extent of the appropriate design elements,
- an appropriate demarcation point of the proposed communications connection at the operations building,
- the existing communication architecture of the existing CCTV system, and
- the architecture and functionality of the proposed CCTV system.

The preliminary CCTV design plans will be submitted as part of the overall preliminary submission package. JMT will develop comment responses to any and all review comments received on the

preliminary CCTV design plans. However, we anticipate plan revisions will be addressed during Task 2 Final Design efforts.

Deliverable: Preliminary Design Plans

Task 2. Final Design

JMT will address all preliminary design comments received during Final Design. JMT will further develop a full plan set compliant with TxDOT Standards for the proposed CCTV system. Construction notes and call-out details will be added to the plan set. Electrical service drop location will be coordinated with design team and voltage drop calculations for the proposed CCTV cameras will be performed to determine electrical wire sizes at the CCTV field cabinets. Fiber optic cable splicing details will also be added to the final plans at the CCTV field cabinets and the operations building. Pay items/quantity tabulations will also be added to the final plans.

Deliverables: JMT anticipates the following submissions will be made to the client for review and comment:

- 60% plans
- 90% pre-final PS&E
- 100% PS&E incorporated into Final Advertisement

The design team will address all comments received from client reviews on the 60% plan submission in the 90% pre-final PS&E submission and all comments received from client reviews on the 90% pre-final PS&E submission in the 100% PS&E submission. JMT will prepare an Engineer's Estimate for construction of the CCTV system and include in each final design submission.

Laredo World Trade Bridge CCTV Design - JMT Estimate

NAME	*Principal*		*Project Manager*		*QA/QC*		*Traffic Engineer I*		*Jr Designer*		*Electrical / Coms*		**SUBTOTALS**	
T&M Rate	$ 300.00		$ 220.00		$ 230.00		$ 151.25		$ 126.04		$ 216.51			
TASKS	Hours	Costs	Hours	Costs	Hours	Costs	Hours	Costs	Hours	Costs	Hours	Costs		
1: Preliminary Design	4	$ 1,200.00	16	$ 3,520.00	8	$ 1,840.00	24	$ 3,630.01	16	$ 2,016.67	12	$ 2,598.14	80	$ 14,804.82
2: Final Design - Plans	4	$ 1,200.00	32	$ 7,040.00	12	$ 2,760.00	60	$ 9,075.01	40	$ 5,041.67	24	$ 5,196.29	172	$ 30,312.97
2: Final Design - Specs	4	$ 1,200.00	16	$ 3,520.00	4	$ 920.00	16	$ 2,420.00	0	$ -	16	$ 3,464.19	56	$ 11,524.19
2: Final Design - Estimates	2	$ 600.00	8	$ 1,760.00	2	$ 460.00	24	$ 3,630.01	0	$ -	8	$ 1,732.10	44	$ 8,182.10
2: Finalize Bid Documents	2	$ 600.00	4	$ 880.00	1	$ 230.00	12	$ 1,815.00	4	$ 504.17	8	$ 1,732.10	31	$ 5,761.27
	0	$ -	0	$ -		$ -	0	$ -	0	$ -		$ -	0	$ -
LABOR TOTAL	16	$ 4,800.00	76	$ 16,720.00	27	$ 6,210.00	136	$ 20,570.03	60	$ 7,562.51	68	$ 14,722.81	383	**$ 70,585.35**

Estimate 10-12 sheets

Directs	Total	Cost
Per Diem ($200/day)	2	$ 400.00
Auto Rental ($80/day)	2	$ 160.00
Flights ($500 RT)	1	$ 500.00
DIRECT TOTAL		**$ 1,060.00**

GRAND TOTAL	**$ 71,645.35**

AMENDMENT #1A
TO PROFESSIONAL SERVICES AGREEMENT

KCI Project No. 00004027_00001 – World Trade Bridge Expansion WA#1

THIS AMENDMENT #1A TO PROFESSIONAL SERVICES AGREEMENT ("**Amendment**") is entered into as of the date of last signature ("**Effective Date**") by and between KCI Technologies, Inc. ("**KCI**") and Structural Engineering Associates, Inc. ("**Client**"), hereinafter referred to jointly as the "**Parties**" or singularly as the "**Party**".

Task 2.1: Additional Surveying Services

1. Coordinate additional efforts with Mexico Design Team for the setting and checking of control points on both the U.S. side and the Mexico side across the river. Coordinate simultaneous static GNSS surveys to establish primary project control for the U.S. side and the Mexico side. Post process static GPS sessions utilizing existing COR stations and observations on local TXDOT benchmarks to create a network adjustment that ties the U.S. survey team's and Mexico's survey team control together.
2. Receive the Mexico survey team's survey data. Analyze the data to determine the coordinate system and ellipsoid model.
3. It was determined that the Mexico survey data is not provided in a usable coordinate system, Geoid model and unit of measure (meters) with the U.S. survey data. It was also determined that the Mexico survey data files provided did not allow for the reprocessing of the survey work into the North American Datum, as needed for our use. In order to bring their work into same datum as the U.S. datum, a localized transformation was applied holding our common project control established during the static survey session, common survey points and cross river total station observations.
4. Coordinate additional survey efforts with Fasken Development in order to locate their irrigation intake line, which is located with the proposed project limits. Survey efforts included coordination and field observations with Fasken's scuba diving team to locate the irrigation intake pipe in the river. Process the survey data. Update the survey information into the existing CAD files. Share survey data with Fasken Development's Team.
5. Coordinate additional survey efforts with Fasken Development as they pothole the top of the intake pipe to determine the pipe's alignment. Field survey the top of intake pipe as potholed by the Fasken's. Process the survey data. Update survey information into the existing CAD files. Share survey data with Fasken Development's Team.
6. Conduct additional survey efforts for the bathymetric survey of the river due to low river levels. Conduct additional field visits to collect survey data of the river due to low river levels.

Task 3.1: HEC-RAS Model Revisions

1. Coordinate additional efforts based on the comments and responses provided by IBWC after their first review of the 1D HEC-RAS models. There were 3 models that have been prepared for IBWC's review: the 1D HEC-RAS effective model, which is the existing model that was provided to the Design Team; the 1D HEC-RAS corrected effective model, which is the existing model with "corrected" terrain model

information including updated bathymetric data and updated merged digital LiDAR data; and the 1D HEC-RAS proposed model, which is the corrected effective model with the new improvements included in it.

2. Research and development a merged digital terrain model from available U.S. and Mexico LiDAR data. Research and download the Mexico LiDAR data. Determine the best method to convert the Mexico LiDAR data into a coordinate system and terrain model that can be merged with the U.S. LiDAR data. Once a merged digital terrain model is complete, reference the overall U.S. / Mexico merged LiDAR data into the 2D HEC-RAS models.
3. At the request of IBWC after their review of the 1D models, take the 1D HEC-RAS models and prepare 2D HEC-RAS models for both the corrective effective model and the proposed model.
4. Compare the results of the 2D corrective effective model and the 2D proposed model.
5. Bring the 2D HEC-RAS models into a GIS system. Generate shape file GIS data showing the differences between the 2 models, as requested by IBWC.
6. Revise 2D HEC-RAS proposed model to include the changes to the New Bridge area made by the Design Team. This includes the removal of the retaining wall that is replaced by the embankment area, and the addition of a bridge span.

a. Section C (Fees and Payments) of the Agreement is amended to include the following fee for the Additional Services added by this Amendment:

Fee Summary

Task 2.1: Additional Surveying Services	$33,500.00
Task 3.1: HEC-RAS Model Revisions	$38,700.00
Total Amendment #1 Fee:	**$72,200.00**

2. **Definitions**. Capitalized terms used and not defined in this Amendment have the respective meanings assigned to them in the Agreement.

3. **Agreement Remains in Effect**. Except as expressly provided in this Amendment, all of the terms and provisions of the Agreement are and shall remain in full force and effect and are hereby ratified and confirmed by the Parties. On and after the Effective Date, each reference in the Agreement to "this Agreement," "the Agreement," "hereunder," "hereof," "herein," or words of like import will mean and be a reference to the Agreement as amended by this Amendment.

4. **Counterparts**. This Amendment may be executed in any number of counterparts, each of which will be deemed to be an original and all of which will constitute one and the same agreement, and it will not be necessary in making proof of this Amendment to produce or account for more than one such fully executed counterpart. Electronic signatures shall be deemed an original signed writing for all purposes hereof and that either Party may produce such copies or electronic signatures, without the need to produce original, hand-written signatures, to prove the existence of this Amendment in any proceeding brought hereunder.

(Remainder of page left intentionally blank.)

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed. Each Party warrants and represents that its respective signatories are duly authorized to execute this Amendment.

KCI:
KCI Technologies, Inc.
BY:

_____
Signature

_____
Name

_____
Title

_____
Date

CLIENT:
[insert Client entity]
BY:

_____
Signature

_____
Name

_____
Title

_____
Date

AMENDMENT #1B
TO PROFESSIONAL SERVICES AGREEMENT

KCI Project No. 00012175_00001 – World Trade Bridge Expansion WA#2

THIS AMENDMENT #1B TO PROFESSIONAL SERVICES AGREEMENT ("**Amendment**") is entered into as of the date of last signature ("**Effective Date**") by and between KCI Technologies, Inc. ("**KCI**") and Structural Engineering Associates, Inc. ("**Client**"), hereinafter referred to jointly as the "**Parties**" or singularly as the "**Party**".

Task 12: Retaining Wall Design

1. Evaluate retaining wall design with the Design Team.
2. Review proposed retaining wall locations as coordinated with the Design Team.
3. Develop alignment, top and bottom of wall profiles, and plan sheets for the retaining wall.
4. Analyze the retaining wall underdrain. Design underdrain system and provide details.
5. Evaluate embankment areas based on geotechnical report findings. Consider options for embankment only design.
6. Revise plans to accommodate additional span for the New Northbound Bridge.
7. Design embankment areas based on guidance from the geotechnical engineer and Design Team.
8. Prepare embankment plan sheets and details for the plan set.

Task 13: Bridge Repair - Stabilization Design

1. Meet / Discuss with Client the project's needs and requirements associated with the bridge embankment issues under the existing bridge structure.
2. Conduct a site visit to review site conditions and take photos of the existing embankment concerns under the existing bridge.
3. Analyze site conditions data. Design embankment stabilization options.
4. Review stabilization options with Design Team. Select an embankment stabilization design.
5. Calculate quantities of the embankment stabilization area. Update overall project cost estimates.
6. Prepare construction plans and details for the embankment stabilization repair area under the existing bridge structure.

Task 14: POE Security Features

1. Develop layouts for MEP Pre-read equipment to accommodate proposed lane configuration on the New Northbound Bridge.
2. Adjust roadway plans to accommodate pavement widening and tie in at MEP Pre-read equipment.
3. Meet with the Client and the Design Team to discuss the project's needs and requirements related to the Port of Entry (POE) Security Features.
4. Receive input from the U.S. Government representatives, including GSA and US CBP on the updated security features being requested for the POE.
5. Work with the Design Team to prepare updated fence, gate, and security lighting details and locate them on the site plan.
6. Prepare plans and details for the security fence and security gate for the new bridge. Prepare plans and details for the updated security fence and security gate for the existing bridge.
7. Update the grading plans to include the security gate tracks as discussed with the Design Team.
8. Update the project quantities and cost estimates to include the security fence and security gates.

Task 15: DAP Coordination & Design

1. Meet / Discuss with Client and the Design Team to discuss the project's needs and requirements related to the Donation Acceptance Program (DAP) plans being requested by the U.S. Government.
2. Work with the Design Team to develop and determine the overall DAP area that will be donated to the U. S. Government.
3. Develop a separate set of construction plans that only include the DAP area improvements, as requested by the U.S. Government.
4. Submit 60 / 100% construction plans to the DAP Team for review and comment and subsequent approval.
5. Attend up to 4 meetings with the Design Team and U.S. Government representatives to review and discuss the DAP Design.
6. Receive comments from the DAP Team for the DAP plans. Update the construction plans. Resubmit plans to the Design Team to be submitted with the DAP application for approval.

Task 16: MEP System Coordination & Design

1. Meet with Client and the Design Team to discuss the project's needs and requirements related to the Multi-Energy Portal (MEP) system's operation on the new bridge, as being requested by the U.S. Government.
2. Work with the Design Team and MEP Team to develop and determine the overall MEP system revisions required to incorporate the new bridge.
3. Update the project quantities and cost estimates to include the MEP system revisions being requested by the MEP Team.

4. Update the project's construction plans to include the MEP system revisions.
5. Attend up to 4 meetings with the Design Team and MEP Team and U.S. Government representatives to review and discuss the MEP system revisions.
6. Receive comments from the MEP Team. Update the construction plans.
    a. Eliminate pre-read equipment from the PS&E set. This will be handled under a separate contract.
    b. Adjust gate location and fence alignment.
    c. Revise grading plan to accommodate gate operations
    d. Adjust proposed storm drainage system to accommodate changes
    e. Adjust lighting plan to account for elimination of the pre-read equipment.
        i. Revise photometric calculations to eliminate illumination poles in center median.
        ii. Evaluate lighting standards to achieve required photometrics. Note that a median may be necessary to achieve the required photometrics.
        iii. Update illumination plans, quantities, and estimate to incorporate the changes.

a. Section C (Fees and Payments) of the Agreement is amended to include the following fee for the Additional Services added by this Amendment:

Fee Summary

Task 12: Retaining Wall Design	$16,900.00
Task 13: Bridge Embankment Stabilization Design	$4,700.00
Task 14: POE Security Features	$13,800.00
Task 15: DAP Design & Coordination	$22,500.00
Task 16: MEP System Design & Coordination	$17,800.00
Total Amendment #1 Fee:	**$75,700.00**

2. **Definitions**. Capitalized terms used and not defined in this Amendment have the respective meanings assigned to them in the Agreement.

3. **Agreement Remains in Effect**. Except as expressly provided in this Amendment, all of the terms and provisions of the Agreement are and shall remain in full force and effect and are hereby ratified and confirmed by the Parties. On and after the Effective Date, each reference in the Agreement to "this Agreement," "the Agreement," "hereunder," "hereof," "herein," or words of like import will mean and be a reference to the Agreement as amended by this Amendment.

4. **Counterparts**. This Amendment may be executed in any number of counterparts, each of which will be deemed to be an original and all of which will constitute one and the same agreement, and it will not be necessary in making proof of this Amendment to produce or account for more than one such fully executed counterpart. Electronic signatures shall be

deemed an original signed writing for all purposes hereof and that either Party may produce such copies or electronic signatures, without the need to produce original, hand-written signatures, to prove the existence of this Amendment in any proceeding brought hereunder.

(Remainder of page left intentionally blank.)

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed. Each Party warrants and represents that its respective signatories are duly authorized to execute this Amendment.

KCI:
KCI Technologies, Inc.
BY:

_____
Signature

_____
Name

_____
Title

_____
Date

CLIENT:
Structural Engineering Associates, Inc.
BY:

_____
Signature

_____
Name

_____
Title

_____
Date

AMENDMENT #2
TO PROFESSIONAL SERVICES AGREEMENT

KCI Project No. 00012175_00001 – World Trade Bridge Expansion WA#2

THIS AMENDMENT #1B TO PROFESSIONAL SERVICES AGREEMENT ("**Amendment**") is entered into as of the date of last signature ("**Effective Date**") by and between KCI Technologies, Inc. ("**KCI**") and Structural Engineering Associates, Inc. ("**Client**"), hereinafter referred to jointly as the "**Parties**" or singularly as the "**Party**".

Task 17: Roadway Profile Revisions

1. Meet with Client and the Design Team to discuss the project's needs and requirements related to the adjustment of the roadway profile on the bridge to match adjustments of the roadway profile made by Mexico.
2. Coordinate with Mexico's Design Team to discuss the adjustments to the vertical curves along the profile grade line (PGL).
3. Receive Mexico's Design Team's PGL data. Compare to our PGL data. Provide feedback and corrections to Mexico's Design Team.
4. Review final coordination PGL data from Mexico for accuracy with our PGL data.
5. Update our PGL data in the CAD files.
6. Update the roadway plan & profile sheets. Make adjustments to the labels, notes and tables.
7. Resubmit updated plan sheets with the project's plan set.

Task 18: HEC-RAS Model Mexico Coordination

1. At the request of IBWC, coordinate with Mexico's Design Team to ensure that the models and bridge data from the HEC-RAS files are comparable.
2. Receive Mexico's Design Team's data. Review the data against our data.
3. Coordinate with Mexico's Design Team on the differences between the model data. Determine solutions to the HEC-RAS data to come to a mutual agreement with the data to be used for our submittals.
4. Make adjustments to our HEC-RAS files based on coordination and feedback with Mexico.
5. Prepare updated HEC-RAS 2D models with the revised data.
6. Resubmit HEC-RAS models to IBWC for review and approval.

a. Section C (Fees and Payments) of the Agreement is amended to include the following fee for the Additional Services added by this Amendment:

Fee Summary

Task 17: Roadway Profile Revisions	$9,700.00
Task 18: HEC-RAS Model Mexico Coordination	$12,400.00
Total Amendment #1 Fee:	**$22,100.00**

2. **Definitions**. Capitalized terms used and not defined in this Amendment have the respective meanings assigned to them in the Agreement.

3. **Agreement Remains in Effect**. Except as expressly provided in this Amendment, all of the terms and provisions of the Agreement are and shall remain in full force and effect and are hereby ratified and confirmed by the Parties. On and after the Effective Date, each reference in the Agreement to "this Agreement," "the Agreement," "hereunder," "hereof," "herein," or words of like import will mean and be a reference to the Agreement as amended by this Amendment.

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(Remainder of page left intentionally blank.)

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed. Each Party warrants and represents that its respective signatories are duly authorized to execute this Amendment.

KCI:
KCI Technologies, Inc.
BY:

_____
Signature

_____
Name

_____
Title

_____
Date

CLIENT:
Structural Engineering Associates, Inc.
BY:

_____
Signature

_____
Name

_____
Title

_____
Date