

EXHIBIT “F”
HIDALGO COUNTY
Professional Engineering Services
Agreement # C-22-0588-10-04

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. **C-22-0588-10-04**, incorporated herein by reference, for the **“TxDOT Highway Safety Improvement Program”** made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the **“Owner,”** and KCI Technologies, Inc., hereinafter called **“Engineer”**.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide preparation for roadway design, traffic design, utility coordination, environmental documentation, and construction phase services necessary to support the design process.

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 **\$88,852.91**. This amount is based upon the costs outlined in the **Attachment “B”** – *“Fee Proposal”* 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-22-0588-10-04** 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-22-0588-10-04 , provided in this Work Authorization; or on (March 15th, 2023).** *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-22-0588-10-04.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct 3, Commissioner Everardo “Ever” Villarreal**, as to content and detail of this **Work Authorization No. 1.**

HIDALGO COUNTY PRECINCT No. 3

By: _____
Everardo “Ever” Villarreal, Commissioner

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted and approved by the Hidalgo County Commissioners Court and hereby executed and effective as of the date indicated below.

APPROVED BY COMMISSIONERS’ COURT ON October 4th, 2022.
Agenda Item No. 87735 Executive Office: _____

ENGINEER:
KCI TECHNOLOGIES, INC.

COUNTY:
COUNTY OF HIDALGO

Oscar Arturo Garza, P.E., S.I.T., Practice Leader

Hon. Richard F. Cortez, County Judge

ATTEST:

Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS:

- Attachment “A”** – *Scope of Services to be provided by Engineer*
- Attachment “B”** – *Fee Proposal*
- Attachment “C”** – *Approved Work/Project Schedule (If applicable)*



ATTACHMENT A

**PROJECT SPECIFIC SCOPE OF SERVICES
TO BE PROVIDED BY ENGINEER**

ATTACHMENT A

SERVICES TO BE PROVIDED BY THE ENGINEER

The Engineer shall provide engineering services required for the preparation of plans, specifications and estimates (PS&E) and related documents, for six (6) off-system projects within Hidalgo County listed below. These services may include, but are not limited to, preparing roadway design, traffic design, utility coordination, environmental documentation, and construction phase services necessary to support the design process.

Project Locations:

Mile 2 Road @ Minnesota Road
Mile 3 Road @ Western Road
Mile 4 Road @ Texan Road
Mile 8 Road @ Texan Road
Mile 4 N. @ Trosper
Mile 5 Rd @ Western Road

TASK DESCRIPTIONS AND FUNCTION CODES

The Engineer is responsible for designating and providing the services of the following individuals or entities:

1. **Utility Coordinator:** individual or entity performing Utility-related Services that are not required to be performed by a licensed engineer under Texas law.
2. **Utility Engineer:** individual or entity performing Utility-related Services that are required to be performed by a licensed engineer under Texas law.

The Engineer shall categorize each task performed to correspond with the Function Codes (FC) and Task Descriptions.

FUNCTION CODE 102(110) – FEASIBILITY STUDIES

ROUTE AND DESIGN STUDIES

110.1. Data Collection and Field Reconnaissance. The Engineer shall collect, review and evaluate data described below:

1. Data, if available, including “as-built plans”, existing schematics, right-of-way maps, Subsurface Utility Engineering (SUE) mapping, existing cross sections, existing planimetric mapping, environmental documents, existing channel and drainage easement data, existing traffic counts, accident data, Bridge Inspection records, Project Management Information system (PMIS) data,

identified endangered species, identified hazardous material sites, current unit bid price information, current special provisions, special specifications, and standard drawings.

2. Documents for existing and proposed development along proposed route from local municipalities and local ordinances related to project development.
3. Utility plans and documents from appropriate municipalities and agencies.
4. Flood plain information and studies from the Federal Emergency Management Agency (FEMA), the United States Army Corps of Engineers (USACE), local municipalities, and other governmental agencies..
5. Conduct field reconnaissance and collect data including a photographic record of notable existing features.

110.2. Design Criteria. The Engineer shall develop the roadway design criteria based on the controlling factors specified by the State (*i.e.* 4R, 3R, 2R, or special facilities), by use of the funding categories, design speed, functional classification, roadway class and any other set criteria as set forth in *PS&E Preparation Manual, Roadway Design Manual, Bridge Design Manual, Hydraulic Design Manual*, and other deemed necessary State approved manuals.

110.3. Preliminary Cost Estimates. The Engineer shall develop a preliminary cost estimate using the Average Low Bid Unit Price. The Engineer shall estimate the total project cost including preliminary engineering, final engineering, right-of-way (ROW) acquisition, environmental compliance and mitigation, construction, utility relocation, and construction engineering inspection (CEI).

FUNCTION CODE 145(145, 164) – MANAGING CONTRACTED/DONATED PE

PROJECT MANAGEMENT AND ADMINISTRATION

The Engineer, in association with the State's Project Manager shall be responsible for directing and coordinating all activities associated with the project to comply with State policies and procedures, and to deliver that work on time.

Project Management and Coordination. The Engineer shall coordinate all subconsultant activity to include quality of and consistency of plans and administration of the invoices and monthly progress reports. The Engineer shall coordinate with necessary local entities.

The Engineer shall:

- Prepare monthly written progress reports for each project.
- Develop and maintain a detailed project schedule to track project conformance to Exhibit C, Work Schedule, for this work authorization. The schedule submittals shall be hard copy and electronic format.

- Meet on a scheduled basis with the State to review project progress. Prepare, distribute, and file both written and electronic correspondence.
- Prepare and distribute meeting minutes/notes.
- Document phone calls and conference calls as required during the project to coordinate the work for various team members.

FUNCTION CODE 160(160) - ROADWAY DESIGN

160.1. Roadway Design.

The Engineer shall use Bentley's OpenRoads 3D Design technology in the design and preparation of the roadway plan sheets.

The Engineer shall use the versions of MicroStation and GEOPAK that are implemented at TxDOT at the time the work authorization is executed. However, TxDOT may approve the use of other versions.

The Engineer shall provide drawings using CADD standards as required by the State. The drawings must consist of a planimetric file of existing features and files of the proposed improvements. The roadway base map must contain line work that depicts existing surface features obtained from the schematic drawing. Existing major subsurface and surface utilities must be shown if requested by the State. Existing and proposed right-of-way lines must be shown. Plan and Profile must be shown on separate or same sheets (this depends upon width of pavement) for main lanes, frontage roads, and direct connectors.

The plan view must contain the following design elements:

1. Calculated roadway centerlines for mainlanes, ramps, cross streets and frontage roads, as applicable. Horizontal control points must be shown. The alignments must be calculated using OpenRoads horizontal geometry tools..
2. Pavement edges for all improvements (mainlanes, direct connectors, ramps, cross streets, driveways and frontage roads, if applicable).
3. Lane and pavement width dimensions.
4. The geometrics of ramps, auxiliary and managed lanes.
5. Proposed structure locations, lengths, and widths.
6. Direction of traffic flow on all roadways. Lane lines and arrows indicating the number of lanes must also be shown.
7. Drawing scale shall be 1"=100'
8. Control of access line, ROW lines and easements.
9. Begin and end superelevation transitions and cross slope changes.

10. Limits of riprap, block sod, and seeding.
11. Existing utilities and structures.
12. Benchmark information.
13. Radii call outs, curb location, Concrete Traffic Barrier (CTB), guard fence, crash safety items and American with Disabilities Act Accessibility Guidelines (ADAAG) compliance items.

The profile view must contain the following design elements:

1. Calculated profile grade for proposed mainlanes (cite direction), direct connectors, ramps, cross streets and frontage roads, if applicable. Vertical curve data, including "K" values must be shown. The profiles must be calculated using OpenRoads vertical geometry tools.
2. Existing and proposed profiles along the proposed centerline of the mainlanes, the outside shoulder line of ramps, and the outside gutter line of the designated (north, south, east or west) bound frontage roads.
3. Water surface elevations at major stream crossing for 2, 5, 10, 25, 50, and 100 year storms.
4. Calculated vertical clearances at grade separations and overpasses, taking into account the appropriate superelevation rate, superstructure depth and required clearance.
5. The location of interchanges, mainlanes, grade separations and ramps (shall include cross sections of any proposed or existing roadway, structure, or utility crossing).
6. Drawing vertical scale to be 1"=10'.

160.2. Typical Sections: The Engineer shall prepare typical sections for all proposed and existing roadways and structures. Typical sections must include width of travel lanes, shoulders, outer separations, border widths, curb offsets, managed lanes, and ROW. The typical section must also include Proposed Profile Grade Line (PGL), centerline, pavement design, longitudinal joints, side slopes, sodding or seeding limits, concrete traffic barriers and sidewalks, if required, station limits, common proposed and existing structures including retaining walls, existing pavement removal, riprap, limits of embankment and excavation, etc.

160.3. Pavement Design. If applicable, the Engineer shall incorporate the pavement design developed by the State for this project. If the pavement design is not available, the State may request the Engineer to perform pavement design and submit to State for review and approval.

FUNCTION CODE 160(162) - ROADWAY DESIGN

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION (PERMANENT)

162.1. Signing. The Engineer shall prepare drawings, specifications, and details for all signs. The Engineer shall coordinate with the State (and other Engineers as

required) for overall temporary, interim and final signing strategies and placement of signs outside contract limits. The Engineer shall:

- Prepare sign detail sheets for large guide signs showing dimensions, lettering, shields, borders, corner radii, etc., and shall provide a summary of large and small signs to be removed, relocated, or replaced.
- Designate the shields to be attached to guide signs.
- Illustrate and number the proposed signs on plan sheets.
- Select each sign foundation from State Standards.

162.2. Pavement Marking. The Engineer shall detail both permanent and temporary pavement markings and channelization devices on plan sheets. The Engineer shall coordinate with the State (and other Engineers as required) for overall temporary, interim, and final pavement marking strategies. The Engineer shall select Pavement markings from the latest State standards.

The Engineer shall provide a 3D corridor model with the proposed pavement marking stenciled onto the model.

The Engineer shall provide the following information on sign and pavement marking layouts:

- Roadway layout.
- Center line with station numbering.
- Designation of arrow used on exit direction signs
- Culverts and other structures that present a hazard to traffic.
- Location of utilities.
- Existing signs to remain, to be removed, to be relocated or replaced.
- Proposed signs (illustrated, numbered and size).
- Proposed overhead sign bridges to remain, to be revised, removed, relocated, or replaced.
- Proposed overhead sign bridges, indicating location by plan.
- Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation.
- Quantities of existing pavement markings to be removed.
- Proposed delineators, object markers, and mailboxes.
- The location of interchanges, mainlanes, grade separations, frontage roads and ramps.
- The number of lanes in each section of proposed highway and the location of changes in numbers of lanes.
- Right-of-way limits.
- Direction of traffic flow on all roadways.

162.3. Flashing beacons. Based upon the results of the Traffic Warrant Studies, the Engineer shall identify and prepare Traffic Signal Plans for all warranted traffic signals. The Engineer shall confirm the power source for all signals and coordinate with the appropriate utility agency. Traffic Signal Plans must be signed and sealed by a Texas Registered Professional Engineer. The Engineer shall develop all quantities, general notes, specifications and incorporate the appropriate agency standards required to complete construction. Traffic signal poles, fixtures, signs, and lighting must be designed per the Green Ribbon Report recommendations and standards.

The Engineer shall provide the following information in the Traffic Signal Plans:

1. Layout
 - a. Estimate and quantity sheet
 - (1) List of all bid items
 - (2) Bid item quantities
 - (3) Specification item number
 - (4) Paid item description and unit of measure
 - b. Basis of estimate sheet (list of materials)
 - c. General notes and specification data.
 - d. Condition diagram
 - (1) Highway and intersection design features
 - (2) Roadside development
 - (3) Traffic control including illumination
 - e. Plan sheet(s)
 - (1) Existing traffic control that will remain (signs and markings)
 - (2) Existing utilities
 - (3) Proposed highway improvements
 - (4) Proposed installation
 - (5) Proposed additional traffic controls
 - (6) Proposed illumination attached to signal poles.
 - (7) Proposed power pole source
 - f. Notes for plan layout
 - g. Phase sequence diagram(s)
 - (1) Signal locations
 - (2) Signal indications
 - (3) Phase diagram
 - (4) Signal sequence table
 - (5) Flashing operation (normal and emergency)
 - (6) Preemption operation (when applicable)
 - (7) Contact responsible Agency to obtain interval timing, cycle length and offset
 - h. Construction detail sheets(s)
 - (1) Poles (State standard sheets)
 - (2) Detectors

- (3) Pull Box and conduit layout
 - (4) Controller Foundation standard sheet
 - (5) Electrical chart
 - i. Marking details (when applicable)
 - j. Aerial or underground interconnect details (when applicable)
- 2. General Requirements
 - a. Contact local utility company
 - (1) Confirm power source
 - b. Prepare governing specifications and special provisions list
 - c. Prepare project estimate
 - d. Conduct traffic counts and prepare Traffic Signal Warrant Studies for all proposed and existing traffic signals at designated locations.
- 3. Summary of Quantities
 - a. Small signs tabulation
 - b. Large signs tabulation including all guide signs
- 4. Sign Detail Sheets
 - a. All signs except route markers
 - b. Design details for large guide signs
 - c. Dimensioning (letters, shields, borders, etc.)
 - d. Designation of shields attached to guide signs

FUNCTION CODE 160(163) - ROADWAY DESIGN

MISCELLANEOUS (ROADWAY)

The Engineer shall provide the following services:

163.1. Traffic Control Plan, Detours, Sequence of Construction. The Engineer shall prepare Traffic Control Plans (TCP) including TCP typical sections, for the project. The Engineer shall complete Form 2229-Significant Project Procedures along with Page 4 of Form 1002, specifically titled Accelerated Construction Procedures. A detailed TCP must be developed in accordance with the latest edition of the TMUTCD. The Engineer shall implement the current Barricade and Construction (BC) standards and TCP standards as applicable. The Engineer shall interface and coordinate phases of work, including the TCP, with adjacent Engineers. The Engineer shall:

1. Provide a written narrative of the construction sequencing and work activities per phase and determine the existing and proposed traffic control devices (regulatory signs, warning signs, guide signs, route markers, construction pavement markings, barricades, flag personnel, temporary traffic signals, etc.) to be used to handle traffic during each construction sequence. The Engineer shall show proposed traffic

control devices at grade intersections during each construction phase (stop signs, flag person, signals, etc.). The Engineer shall show temporary roadways, ramps, structures (including railroad shoo-fly) and detours required to maintain lane continuity throughout the construction phasing. If temporary shoring is required, prepare layouts and show the limits on the applicable TCP.

2. Develop each TCP to provide continuous, safe access to each adjacent property during all phases of construction and to preserve existing access. The Engineer shall notify the State in the event existing access must be eliminated, and must receive approval from the State prior to any elimination of existing access.
3. Prepare each TCP in coordination with the State. The TCP must include interim signing for every phase of construction. Interim signing must include regulatory, warning, construction, route, and guide signs. The Engineer shall interface and coordinate phases of work, including the TCP, with adjacent Engineers, which are responsible for the preparation of the PS&E for adjacent projects.
4. Make every effort to prevent detours and utility relocations from extending beyond the proposed Right-of-way lines. If it is necessary to obtain additional permanent or temporary easements and Right-of-Entry, the Engineer shall notify the State in writing of the need and justification for such action. The Engineer shall identify and coordinate with all utility companies for relocations required.
5. Describe the type of work to be performed for each phase of sequence of construction and any special instructions (e.g. storm drain, culverts, bridges, railing, illumination, signals, retaining walls, signing, paving surface sequencing or concrete placement, ROW restrictions, utilities, etc.) that the contractor should be made aware to include limits of construction, obliteration, and shifting or detouring of traffic prior to the proceeding phase.
6. Include the work limits, the location of channelizing devices, positive barrier, location and direction of traffic, work area, stations, pavement markings, and other information deemed necessary for each phase of construction.

163.2. Illumination. The Engineer shall refer to TxDOT's *Highway Illumination Manual* and other deemed necessary State approved manuals for design of continuous lighting and safety lighting for all conventional, high-mast, ramps and underpass lighting. The Engineer shall include safety lighting as part of each design on each flashing beacon. The Engineer shall provide a preliminary layout for initial review and approval by the State. The Engineer shall prepare circuit wiring diagrams showing the number of luminaries on each circuit, electrical conductors, length of runs, service pole assemblies. Underpass lighting must be used on all structures within each project. The Engineer shall integrate existing illumination within the project limits into the proposed design.

- 163.3. Storm Water Pollution Prevention Plans (SW3P).** The Engineer shall develop SW3P, on separate sheets from (but in conformance with) the TCP, to minimize potential impact to receiving waterways. The SW3P must include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control.
- 163.4. Compute and Tabulate Quantities.** The Engineer shall provide the summaries and quantities within all formal submittals.
- 163.5. Miscellaneous Structural Details.** The Engineer shall provide necessary details required to supplement standard details.
- 163.6. Estimate.** The Engineer shall independently develop and report quantities necessary to construct the contract in standard State bid format at the specified milestones and Final PS&E submittals. The Engineer shall prepare each construction cost estimates using Estimator or any approved method. The estimate shall be provided at each milestone submittal or in TxDOT CONNECT format at the 95% and Final PS&E submittals per State's District requirement.
- 163.7. Contract time determination.** The Engineer shall prepare a detailed contract time estimate to determine the approximate time required for construction of the project in calendar and working days (based on the State standard definitions of calendar and working days) at the 95% and Final PS&E milestone. The schedule must include tasks, subtasks, critical dates, milestones, deliverables, and review requirements in a format which depicts the interdependence of the various items and adjacent construction packages. The Engineer shall provide assistance to the State in interpreting the schedule.
- 163.8. Specifications and General Notes.** The Engineer shall identify necessary standard specifications, special specifications, special provisions and the appropriate reference items. The Engineer shall prepare General Notes from the District's *Master List of General Notes*, Special Specifications and Special Provisions for inclusion in the plans and bidding documents. The Engineer shall provide General Notes, Special Specifications and Special Provisions in the required format.
- 163.9. Constructability Review.** The Engineer shall provide Independent Quality Review of the constructability of the PS&E sets.

The Engineer shall perform constructability reviews at major project design milestones (e.g. 30%, 60%, 95%, and final plan) to identify potential constructability issues and options that would provide substantial time savings during construction. The constructability review must be performed for all roadway and structural elements such as Sequence of Work and Traffic Control, Drainage (Temporary and Permanent), Storm Water Pollution Prevention Plan (SW3P), Environmental Permits, Issues and Commitments (EPIC) addressed,

identify Utility conflicts; ensuring accuracy and appropriate use of Items, Quantities, General Notes, Standard and Special Specifications, Special Provisions, Contract Time/Schedule, Standards; and providing detailed comments in an approved format. Reviews must be captured in a Constructability Log identifying areas of concern and potential conflict. The Engineer shall provide the results of all Constructability reviews and recommendations to the State at major project design milestone submittals.

Deliverables

Plans

The Engineer shall provide the following information at each submittal:

1. 30% Plans Submittal

- 1.1. Eight sets of 11" x 17" plan sheets for the State District Review.
- 1.2. Estimate of construction cost.
- 1.3. Engineer's internal QA and QC markup set.
- 1.4. Form 1002 and Design Exceptions with existing and proposed typical sections, location map and design exception exhibits.
- 1.5. A Preliminary 3D corridor model, in the most current format, created using Bentley's OpenRoads tools, and with detail to verify the design of the 30% plan sheets.

2. 60% Plans Submittal:

- 2.1. Eight sets of 11" x 17" plan sets for the State District review.
- 2.2. Estimate of construction cost.
- 2.3. Engineer's internal QA and QC marked up set.
- 2.4. A preliminary 3D corridor model, in the most current format, created using Bentley's OpenRoads tools, and with detail to verify the design of the 60% plan sheets. The level of detail of the surface and subsurface features will be at the direction of the State.

3. District Review Submittal (95%):

- 3.1. 12 sets of 11" x 17" plan sheets for the State district review
- 3.2. List of governing Specifications and Special Provisions in addition to those required.
- 3.3. Marked up general notes.
- 3.4. Plans estimate.
- 3.5. New Special Specifications and Special Provisions with Form 1814, if applicable.
- 3.6. Triple Zero Special Provisions.

- 3.7. Engineer sign, seal and date supplemental sheets (8 ½" x 11").
 - 3.8. Contract time determination summary.
 - 3.9. Significant project procedures form.
 - 3.10. Right-of-Way and utilities certification.
 - 3.11. Temporary road closure letters.
 - 3.12. Construction speed zone request.
 - 3.13. Engineer's internal QA and QC marked-up set.
 - 3.14. Other supporting documents.
 - 3.15. A detailed 3D corridor model, in the most current format, created using Bentley's OpenRoads tools, and with detail to verify the design of the 95% plan sheets. The level of detail of the surface and subsurface features will be at the direction of the State.
4. Final submittal (100%).
- 4.1. 14 paper sets of 11" x 17"
 - 4.2. Revised supporting documents from 95% review comments.
 - 4.3. A final 3D corridor model, in the most current format created using Bentley's OpenRoadsCivil tools. The level of detail of the surface and subsurface features will be at the direction of the State.
 - 4.4. A final 3D earthwork model in either .XML or .ICM format (as directed by the State) created using Bentley's OpenRoads tools. The level of detail of the surface and subsurface features will be at the direction of the State.

Electronic Copies

The Engineer shall furnish the State with a CD or DVD of the final plans in the format of current CADD system used by the State, .pdf format, and in the State's File Management System (FMS) format.

The Engineer shall also provide separate CD or DVD containing cross section information (in dgn, XLR, & ASCII formats) for the State contractor to use.

The Engineer shall provide an electronic copy of Primavera file or the latest scheduling program used by the State for construction time estimate.

With the approval of the State, and in lieu of the above, the Engineer may maintain the project files in the State's ProjectWise container. The handoff of the electronic files will be via email to the State, with a URN link to the project location in ProjectWise provided in the email.

Calculations

The Engineer shall provide the following:

Working copies of all spreadsheets and output from any programs utilized on a CD or DVD in a universally reliable format.

The Engineer may provide the calculations in .pdf format in lieu of the bound hard copies. The .pdf file should be submitted on a CD, DVD, or in ProjectWise (if applicable).



ATTACHMENT B

FEE PROPOSAL

Attachment B
Fee Schedule - Itemized
Method of Payment - Lump Sum

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
MILE 4 @ TEXAN RD							
PRIME PROVIDER - KCI Technologies, Inc.							
	2	2	14	14	2	2	
FC 110							
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	2	2	14	14	2	2	36
CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 432.10	\$ 369.56	\$ 1,665.58	\$ 1,360.24	\$ 227.42	\$ 160.84	\$ 4,215.74
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL							\$ 4,215.74

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 4 @ TEXAN RD				
SUB PROVIDER - MELDEN & HUNT				
				0
FC 160(150) - DESIGN SURVEYS	2	4	6	
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	
TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 4 @ TEXAN RD	\$ 6,389.42			

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
Prime Provider: KCI Technologies, Inc.							
MILE 8 @ TEXAN RD							
	2	2	14	14	2	2	
FC 110							0
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	2	2	14	14	2	2	36
CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 432.10	\$ 369.56	\$ 1,665.58	\$ 1,360.24	\$ 227.42	\$ 160.84	\$ 4,215.74
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL - FC 102 (110)							\$ 4,215.74

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 8 @ TEXAN RD				
SUB PROVIDER - MELDEN & HUNT				
				0
FC 160(150) - DESIGN SURVEYS	2	4	6	
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	

Attachment B
Fee Schedule - Itemized
Method of Payment - Lump Sum

TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 8 @ TEXAN RD	\$ 6,389.42			

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
Prime Provider: KCI Technologies, Inc.							
MILE 2 @ MINNESOTA							
	6	6	34	34	7	7	
FC 110							
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	6	6	34	34	7	7	94
CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 1,296.30	\$ 1,108.68	\$ 4,044.98	\$ 3,303.44	\$ 795.97	\$ 562.94	\$ 11,112.31
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL - FC 102 (110)							\$ 11,112.31

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 2 @ MINNESOTA				
SUB PROVIDER - MELDEN & HUNT				0
FC 160(150) - DESIGN SURVEYS	2	4	6	
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	
TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 2 @ MINNESOTA	\$ 13,285.99			

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
Prime Provider: KCI Technologies, Inc.							
MILE 3 @ WESTERN							
	8	8	36	36	9	8	
FC 110							0
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	8	8	36	36	9	8	105
CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 1,728.40	\$ 1,478.24	\$ 4,282.92	\$ 3,497.76	\$ 1,023.39	\$ 643.36	\$ 12,654.07
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL - FC 102 (110)							\$ 12,654.07

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 3 @ WESTERN				

Attachment B
Fee Schedule - Itemized
Method of Payment - Lump Sum

SUB PROVIDER - MELDEN & HUNT				
FC 160(150) - DESIGN SURVEYS	2	4	6	0
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	
TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 3 @ WESTERN	\$ 14,827.75			

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
Prime Provider: KCI Technologies, Inc.							
MILE 4 @ TROSPER							
	24	32	92	80	26	24	
FC 110							0
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	24	32	92	80	26	24	278
CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 5,185.20	\$ 5,912.96	\$ 10,945.24	\$ 7,772.80	\$ 2,956.46	\$ 1,930.08	\$ 34,702.74
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL - FC 102 (110)							\$ 34,702.74

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 4 @ TROSPER				
SUB PROVIDER - MELDEN & HUNT				
FC 160(150) - DESIGN SURVEYS	2	4	6	0
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	
TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 4 @ TROSPER	\$ 36,876.42			

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	CADD OPERATOR	TOTAL LABOR HRS. & COSTS
Prime Provider: KCI Technologies, Inc.							
MILE 5 @ WESTERN							
	7	8	22	22	6	6	
FC 110							0
FC 145							
FC 150							
FC 160							
FC 162							
FC 163							
HOURS SUB-TOTALS	7	8	22	22	6	6	71

Attachment B
Fee Schedule - Itemized
Method of Payment - Lump Sum

CONTRACT RATE PER HOUR	\$ 216.05	\$ 184.78	\$ 118.97	\$ 97.16	\$ 113.71	\$ 80.42	
TOTAL LABOR COSTS	\$ 1,512.35	\$ 1,478.24	\$ 2,617.34	\$ 2,137.52	\$ 682.26	\$ 482.52	\$ 8,910.23
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SUBTOTAL - FC 102 (110)							\$ 8,910.23

TASK DESCRIPTION	RPLS - PROJECT MANAGER	RPLS - TASK LEADER	SENIOR SURVEY TECH	TOTAL LABOR HRS. & COSTS
MILE 5 @ WESTERN				
SUB PROVIDER - MELDEN & HUNT				
				0
FC 160(150) - DESIGN SURVEYS	2	4	6	
Survey Control Sheets and reports				
ROW topographic Maps and reports				
				0
HOURS SUB-TOTALS	2	4	6	12
CONTRACT RATE PER HOUR	\$ 163.77	\$ 141.72	\$ 105.21	
TOTAL LABOR COSTS	\$ 327.54	\$ 566.88	\$ 631.26	\$ 1,525.68
% DISTRIBUTION OF STAFFING	0.00%	0.00%	0.00%	
SUBTOTAL - LABOR				\$ 1,525.68
UNIT COST	QUANTITY	RATE	UNIT	COST
FC 160(150) DESIGN SURVEY AND CONSTRUCTION				
2-PERSON SURVEY CREW	4	\$162.00	HOUR	\$648.00
SUBTOTAL - UNIT COST				\$ 648.00
TOTAL - MILE 5 @ WESTERN		\$ 11,083.91		

SUMMARY	
TOTAL COSTS FOR PRIME ONLY	\$ 75,810.83
TOTAL COSTS FOR SUB PROVIDER ONLY	\$ 13,042.08
NON-SALARY (OTHER DIRECT EXPENSES) FOR PRIME ONLY	
GRAND TOTAL	\$ 88,852.91

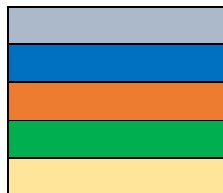


ATTACHMENT C

APPROVED WORK/PROJECT SCHEDULE

**ATTACHMENT C
WORK SCHEDULE**

Task Description	Begin Date	End Date	Total Calendar Days	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	March 2023	Cumulative Completion of WA at Task End Date
WA EXECUTION ISSUE PO	9/19/22	10/10/22	21								0%
FC 150 (SURVEY)	10/15/22	11/30/22	46								10%
FC 145 (PRJ MGT)	10/10/22	3/15/23	156								100%
FC 110, 160, 162, 163	10/10/22	2/10/23	123								90%
30% MILESTONE SUBMITTAL	10/28/22	10/28/22	1								30%
60% MILESTONE SUBMITTAL	12/2/22	12/2/22	1								60%
95% MILESTONE SUBMITTAL	1/13/23	1/13/23	1								90%
100% MILESTONE SUBMITTAL	2/10/23	2/10/23	1								95%
READY TO LET MILESTONE	3/1/23	3/1/23	1								99%
Project Closeout	3/1/2023	3/15/2023	14								100%



Contract and Work Authorization Execution
Survey
Project Management
Engineering Design
Project Milestone Dates