

★ Roll Call Number

20-1089

Agenda Item Number

9

Date July 13, 2020

PROFESSIONAL SERVICES AGREEMENT (PSA) WITH FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC FOR ADDITIONAL DESIGN AND CONSTRUCTION PHASE SERVICES FOR S.W. 9th STREET BRIDGE OVER MIDDLE CREEK REPLACEMENT, NOT TO EXCEED \$140,000

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA: That Supplemental Agreement No. 1 between the City of Des Moines and Foth Infrastructure and Environment, LLC, Patrick Kueter, Principal-in-Charge, 8191 Birchwood Court, Suite L, Johnston, Iowa, 50131, for an additional amount not to exceed \$140,000, based on hourly rates, to provide additional design and construction phase services for S.W. 9th Street Bridge over Middle Creek Replacement, a copy of which is on file in the office of the City Clerk, is hereby approved as to form and content.

BE IT FURTHER RESOLVED: That the Mayor and City Clerk are hereby authorized and directed to execute and attest, respectively, said Supplemental Agreement No. 1 for and on behalf of the City of Des Moines, Iowa.

(Council Letter Number 20-299 attached) Activity ID 01-2019-025

Moved by Gatto to adopt.

FORM APPROVED: s/Kathleen Vanderpool Kathleen Vanderpool Deputy City Attorney

Funding Source: 2020-2021 CIP, Page Bridge - 4, Citywide Bridges, BR003

Table with 5 columns: COUNCIL ACTION, YEAS, NAYS, PASS, ABSENT. Rows include COWNIE, BOESEN, GATTO, GRAY, MANDELBAUM, VOSS, WESTERGAARD, and TOTAL. Includes MOTION CARRIED and APPROVED indicators.

CERTIFICATE

I, P. Kay Cmelik, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

J. M. Franklin Cownie Mayor

P. Kay Cmelik City Clerk

**CITY OF DES MOINES
SUPPLEMENTAL AGREEMENT NO. 1
TO AGREEMENT FOR PROFESSIONAL SERVICES
SW 9th STREET BRIDGE OVER MIDDLE CREEK REPLACEMENT
Activity ID 01-2019-025**

WHEREAS, on September 23, 2019, by Roll Call No. 19-1471, the City of Des Moines, Iowa, hereinafter referred to as the "City", and Foth Infrastructure and Environment, LLC, Patrick Kueter, Principal-in-Charge, 8191 Birchwood Court, Suite L, Johnston, Iowa, 50131, hereinafter referred to as the "Consultant", entered into a Professional Services Agreement (the Agreement) in connection with the SW 9th Street Bridge over Middle Creek Replacement., not to exceed \$140,000; and

WHEREAS, the City staff has negotiated a Supplemental Agreement No. 1 for additional professional services with the Consultant for preliminary design, final design, and construction administration services; and

NOW, THEREFORE, IT IS MUTUALLY AGREED, that the Agreement for Professional Services, SW 9th Street Bridge over Middle Creek Replacement. is amended as follows:

SECTION 2 - SCOPE OF SERVICES, Paragraph A, SERVICES PROVIDED BY CONSULTANT, is amended by adding the following:

"Consultant shall provide additional design and construction administration services as set forth in Attachment 1 to this Supplemental Agreement."

SECTION 3 – COMPENSATION, Paragraph A, is amended by adding the following:

"Compensation for services under this Supplemental Agreement shall be in accordance with the terms of said original Professional Services Agreement for an additional not-to-exceed amount of \$140,000 to be paid on the basis of hourly labor rates and reimbursable costs based upon Consultant's standard rate schedule attached as Attachment 2.

SECTION 4 – COMPLETION OF WORK, is amended by adding the following:

"The Consultant shall complete all services outlined in Supplemental Agreement No. 1 on or before December 31, 2022, providing no unforeseen delays are experienced beyond the control of the Consultant."

BE IT FURTHER AGREED, that all other terms and conditions of the original September 23, 2019 Agreement shall remain in full effect except as modified by this Supplemental Agreement No. 1.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, in triplicate, as of this 13th day of July, 2020.

CITY OF DES MOINES, IOWA

FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC



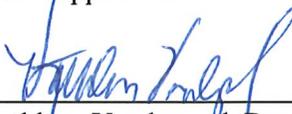
T.M. Franklin Cownie, Mayor



Patrick Kueter, P.E., Principal-in-Charge

Form Approved:

Attest:



Kathleen Vanderpool, Deputy City Attorney



P. Kay Cmelik, City Clerk

**ATTACHMENT 1
SCOPE OF SERVICES
FOR
CITY OF DES MOINES
SUPPLEMENTAL AGREEMENT FOR PROFESSIONAL SERVICES
SW 9th Street Bridge over Middle Creek Replacement
Activity ID 01-2019-025**

The City of Des Moines (CITY) plans to replace the existing SW 9th Street Bridge over Middle Creek (FHWA No. 335221). There are two phases associated with the work to be accomplished: Phase 1 – Structure Alternatives Report and Phase 2 – Design and Construction Services.

The Scope of Services to be performed by the CONSULTANT under this Supplemental Agreement shall encompass and included detailed work, services, materials, testing, equipment and supplies to complete the Phase 2 – Design and Construction Services, including the following tasks:

1. Contract Management
2. Project Coordination
3. Preliminary Design
4. Final Design
5. Letting Services
6. Construction Administration

1. CONTRACT MANAGEMENT

A. Monitoring Project Schedule

The CONSULTANT shall prepare and submit monthly project status updates (1-page) via email, outlining the following activities during the reporting period: activities completed during the prior month, activities planned for the following month, problems encountered and recommended solutions, and overall project status. If design work is not progressing in a manner to comply with the anticipated completion date, the CONSULTANT shall provide a brief summary of the actions to be taken to reduce or eliminate any delays in completing the design in accordance with the agreed upon schedule. The monthly update shall include a list of requested information from the CITY with a desired response date noted to avoid delay of the CONSULTANT services.

The overall project schedule shall be developed to anticipate a Fall/Winter 2021 CITY letting, which shall generally follow the outlined milestones below:

Notice to Proceed:	By August 1, 2020
Preliminary Plans:	Submitted to CITY by January 1, 2021
Pre-Final Plans:	Submitted to CITY by July 2, 2021
Final Plans:	Submitted to CITY by October 1, 2021
City Letting:	Fall/Winter 2021

B. Monitoring Project Scope

The CONSULTANT shall identify, schedule and assign all project tasks, being cognizant of each task's relation to one another, and coordinate them with all entities associated with the project. The CONSULTANT shall inform the CITY of any additional services requested by the CITY that were not included in the scope of services contract approved by the CITY for this project. It shall be the responsibility of the CONSULTANT to inform the CITY of any potential amendments to the contract before the services are rendered. This notice shall occur prior to any extra services being performed. Only those services approved by the CITY are eligible for compensation.

C. Quality Control Plan

The CONSULTANT shall establish review and checking procedures for project deliverables and designate responsibility for implementation of the plan.

D. Invoice Processing and Review

The CONSULTANT shall create, process, and review invoices to ensure they meet CITY requirements and verify all necessary information is included. The CONSULTANT shall coordinate with CITY staff as necessary to

answer any questions and verify percent work complete on project is commensurate with the percent of services being billed, including all other general project administration necessary to complete the project.

2. PROJECT COORDINATION

A. Project Review Meetings

The CONSULTANT shall meet with the CITY or its designated representative to review progress and to discuss specific elements of the project design. The meetings shall serve to establish schedules, develop project goals, establish design parameters, promote a dialog between the various entities, improve the decision-making process, and expedite design development. The CONSULTANT shall document and distribute minutes for all meetings.

The following meetings are included with the scope of work:

- 30% Preliminary Plans – 1 meeting
- 60% Preliminary Plans – 1 meeting
- 95% Pre-Final Plans – 1 meeting

B. Utility Coordination

The CONSULTANT shall meet with utilities to advise the nature and extent of the proposed improvements and any potential conflicts encountered during various points of the design phase. Two (2) review meetings with each utility for Phase 1 are anticipated and shall be scheduled at the followings design milestones:

- 30% Preliminary Design – 1 meeting
- Utility Relocation Plan Review – 1 meeting

The CONSULTANT shall distribute Final Plans to all impacted utilities. The CONSULTANT shall keep a record log of all communications and correspondence with each utility company and provide the record log to the CITY prior to preconstruction conference.

C. Project Permitting

The CONSULTANT shall assist the CITY in preparing applications for permits from governmental authorities that have jurisdiction to approve the design of the project and participate in consultations with such authorities, as necessary. The CONSULTANT shall prepare the following permit applications for the project:

- Iowa Department of Natural Recourses (DNR) Flood Plain Development Permit
- Iowa DNR NPDES Storm Water General Permit No. 2
- United States Army Corps of Engineers (USACE) Section 404 Permit

Any fees for construction permits, licenses, or other costs associated with permits and approvals shall be paid by the CITY. The CONSULTANT shall provide technical criteria, written descriptions and design data for the CITY's use in filing the applications for permits. The CONSULTANT shall prepare the permit applications and other documentation.

D. Public Participation and Involvement

The CONSULTANT shall develop a public participation and involvement plan to be implemented and utilized throughout the design of the project. The plan shall include public notices and public meeting(s).

1. Property Owner Coordination – Public Meetings

The CONSULTANT shall attend a total of one (1) public informational meeting for the project. The meeting is anticipated to be scheduled at the completion of preliminary design (60%). The purpose of the meeting(s) shall be to provide an overview of the proposed improvements and potential impacts to surrounding properties. The CONSULTANT shall gather information from property owners, businesses, and stakeholders regarding project concerns, specific issues, and priorities. The CONSULTANT shall provide the following services:

- i. Participation in one (1) pre-planning meeting approximately one week prior to the public meeting.
- ii. Preparation of necessary maps showing the proposed improvements.
- iii. Preparation of a Project Fact Sheet (for attendees to take)
- iv. Attendance at and participation in public meeting.

Public information meetings shall be scheduled and located conveniently for the public in relationship to the particular project phase. The CONSULTANT shall coordinate meeting date, time and location with the respective Neighborhood Associations. The CITY shall arrange and reserve the meeting space.

3. PRELIMINARY DESIGN AND PLAN PREPARATION

The CONSULTANT shall perform preliminary design with the primary focus on development of the type, size and location plan for the bridge replacement and establishing grading limits for preparation of easement plats.

The work to be performed by the CONSULTANT under the Preliminary Design phase includes the following tasks:

A. Hydrologic and Hydraulic Model

The proposed structure falls within a Federal Emergency Management Agency (FEMA) detailed study area and has a drainage area exceeding two square miles within an urban area. An Iowa DNR Flood Plain Development Permit will be required for the project. The CONSULTANT shall refine the hydraulic model developed during Phase 1 to reflect the final bridge geometry.

A hydraulic analysis shall be performed using Hydraulic Engineering Center River Analysis System (HEC-RAS) software to identify minimum required conveyance open area and impacts to existing flood profiles and flood widths published in the existing Flood Insurance Study (FIS). A “No Rise” condition shall be targeted for the replacement structure.

B. Identify Easement Requirements

The CONSULTANT shall identify permanent/temporary easement needs based on the preliminary design development. The easement requirements recommendations shall take into considerations proposed utilities, construction staging and access, utility relocations and other critical construction elements.

C. Preliminary Plan Development (30% Preliminary Design)

The CONSULTANT shall prepare preliminary plans and shall include bridge type, size and location plan and roadway plan and profile sheets. Upon completion of the 30% preliminary plans, the design plans shall be approximately 30% complete. The work to be performed by the CONSULTANT under Preliminary Plan Development shall consist of the following tasks:

Preliminary Plan and Profiles (D Sheets) - This task consists of the development of preliminary plan and profile sheets showing proposed alignment and profile, existing topography, and proposed improvements. Proposed Right-of-Way and Construction Easement limits based on the catch point lines will be shown. Included will be the necessary CADD work to show the preliminary design features for the proposed improvements. The scale of these sheets will be 1”=50’.

Bridge Type, Size and Location (TS&L) Plans (V Sheets) – Prepare 1”=40’ scale plat Type, Size, and Location (TS&L) plans for the proposed bridge. Includes a Situation Plan and a General Elevation consisting of a longitudinal section along the roadway centerline for the bridge structure. Show roadway curve and profile data, hydraulic data, and traffic data. TS&L plans shall be prepared in accordance with Iowa DOT, IDNR, USACE, and FEMA to facilitate preliminary agency review and approval.

The task assumes standard bridge geometrics, Iowa DOT design criteria and staged construction techniques.

D. Preliminary Plan Development (60% Preliminary Design)

The CONSULTANT shall prepare of preliminary plans and shall include bridge type, size and location, paving, traffic control, utility relocation, and other features of the project. Upon completion of the 60% preliminary plans, the design plans shall be approximately 60% complete. The work to be performed by the CONSULTANT under Preliminary Plan Development shall consist of the following tasks:

Title and Utility Conflict Sheets (A Sheets) - This task consists of assembling the preliminary title and general information sheets. The preliminary title sheets shall include the following: Index of Sheets, Legend, Location Map, Project Number, Design Traffic data.

Preliminary Typical Cross Sections and Details (B Sheets) - This task consists of assembling the Typical Cross Sections to be used for the proposed pavement replacement, including a preliminary determination of the pavement limits to where each Typical Section shall be applicable. Other details such as water main adjustment/replacement details, storm sewer connection details and other miscellaneous details shall be added as needed to construct the project.

Preliminary Estimate of Quantities (C sheets) - Determine preliminary bid items to be included in the project, along with an estimate of quantities for each item.

Preliminary Plan and Profiles (D Sheets) - This task consists of the further development of preliminary plan and profile sheets.

Reference Ties and Bench Marks (G Sheets) - This task consists of assembling reference ties to the plan control points and the benchmark data used to develop the plans and to be preserved throughout construction of the project. This task also includes preserving any Government Corners that are found in the vicinity of the proposed construction.

Preliminary Traffic Control and Staging (J Sheets) - Develop suitable plan for construction scheduling and staging of the Project and for traffic control measures to be implemented during construction. Staging plan shall include provisions for maintaining access to adjacent properties during construction. The plan sheets shall include construction staging section and high level plan exhibits. For estimating purposes, it is assumed that SW 9th Street shall maintain one lane of restricted width alternating two-way traffic during construction and a single detour plan for wide loads will be established.

Preliminary Special Construction Details (U Sheets) – This task consists of preliminary design and drafting associated with special project details.

Preliminary Bridge Plans (V Sheets) – Preliminary (60%) bridge design will be prepared for the SW 9th Street bridge over Middle Creek. Design will not begin until after acceptance of the preliminary roadway alignment. Design may begin prior to agency approval of the bridge TS&L plans.

Coordination with Reviewing Agencies: The CONSULTANT shall maintain communications with the USACE, IDNR, and other agency as necessary to discuss and resolve specific design elements of the project. The CONSULTANT shall prepare minutes of meetings and keep documentation of other communications.

Structural Analysis (Calculations): The CONSULTANT shall determine final member sizes, required reinforcing steel, and connection details for the final plans, based on the approved preliminary plans. Design shall be in accordance with the AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications, current edition at the time the design contract is executed, plus current interim specifications. Live load for the bridge design shall be HL93 loading plus pedestrian loading when applicable.

Preliminary (60%) Plan Development: Prepare 60% bridge plans utilizing details from Iowa DOT standard plans when applicable. Plans shall include abutment and pier detail sheets, superstructure cross-section and longitudinal section sheets, top of slab elevations, and barrier rail details.

Detailed Cross Sections (W, X, Y Sheets) – This task consists of the design and drafting associated with the assembly of detailed cross sections (50' increments) to illustrate typical conditions, drainage designs, and non-typical conditions as needed for guidance during design, review, and quantity estimating purposes.

E. Tree Removal and Planting Plan

The CONSULTANT shall tabulate the number of trees being removed on the projects. The trees removed shall be mitigated through the CITY'S tree replacement fund. A tree planting plan, if requested for compliance with the CITY'S tree mitigation ordinance, shall be added by supplemental agreement.

F. Preliminary Field Review

Conduct a field review with key members of the CONSULTANT Design Team and CITY Staff (Project Development Team) to discuss key issues and design concepts, including drainage, access control, traffic control/stage construction and right-of-way. The review shall determine the completion of the plan design, identify needed adjustments to minimize potential property impact and confirm the proposed staging plans. Revisions shall be noted for preparation of the final design. At the completion of the field review, preparation of Final Plans shall commence.

G. Budget Review

The CONSULTANT shall prepare a preliminary opinion of probable construction cost for the project and compare the cost to the CITY's current Project budget. The CONSULTANT shall if necessary make recommendations pertaining to modifications in the Project in order to address budgetary concerns. Preliminary cost estimates shall be based on representative major project elements and recent bid information. Detailed quantity takeoffs shall not be developed for the preliminary cost estimate.

H. Quality Control

Involve ongoing quality control input from the Project Development Team and the CONSULTANT's senior technical staff throughout the development of preliminary plans. The CONSULTANT is responsible for making specific recommendations and ensuring that critical issues are discussed and resolved prior to submittal of the preliminary plan set to the CITY.

Review the preliminary engineering plan set for technical accuracy, as well as for general constructability and conformance with the project design criteria.

I. Geotechnical - Soil Borings Analysis

The CONSULTANT shall perform geotechnical services to evaluate site conditions and develop engineering recommendations for the project. Geotechnical services includes completing two (2) soils borings at a depth of seventy (70) feet, sampling, laboratory testing and development of a geotechnical report to present findings and recommendations. Engineering analysis shall include Iowa DOT LRFD soil design parameters and abutment slope stability.

Traffic control lane closures with flaggers are anticipated to facilitate boring within the roadway.

The CONSULTANT shall provide the CITY with a signed and sealed PDF copy of the geotechnical report.

J. Paint Sampling and Analysis

The CONSULTANT shall collect representative paint chip samples and submit the sample for analysis of lead and chromium content by a certified laboratory. It is assumed one (1) sample will be collected and analyzed.

K. Asbestos Inspection and Analysis

The CONSULTANT shall inspect the bridge for any materials suspected to contain asbestos fibers in accordance to Iowa DOT IM 4.160. If suspect materials are found, representative samples shall be collected and submitted to a certified laboratory for analysis. It is assumed a maximum of two (2) samples will be collected and analyzed.

L. Acquisition Plats

Prepare acquisition plats and legal descriptions for property to be acquired for the Project and perform land corner and lot surveys as needed for the preparation of the acquisition plats and legal descriptions for each parcel. Said plats and legal descriptions shall comply with requirements of the Iowa Code and shall be prepared by or under the direct supervision of a licensed land surveyor under the laws of the State of Iowa. For Estimating purposes, the following numbers of plats are assumed:

Permanent (Fee Title) Right-of-Way Acquisition Plat 0

Temporary Construction Easement	3
Permanent Easements	
Sanitary Sewer Easement	0
Water Main Easement	0
Storm Sewer Easement	0
Overland Flowage Easement	0

This task also consists of staking the easement locations for purposes of right-of-way negotiations. The staking survey includes the marking of key easement location points in order to visualize the locations in the field and shall also include marking of existing property lines locations. For the purpose of this agreement, all permanent and temporary easements will be staked one (1) time.

M. Deliverables

1. Electronic set of 60% Preliminary Plans
2. Preliminary Plan (60%) Checklist
3. Preliminary Opinion of Probable Construction Cost
4. Geotechnical Report
5. Paint Sampling and Asbestos Sampling Report
6. Temporary Easement Plats

4. FINAL DESIGN AND PLAN PREPARATION

Based upon approved preliminary design, field exam(s), and public informational meeting(s), the CONSULTANT shall proceed with final design, contract drawings, specifications and opinion of probable construction costs for the award of a single Contract for the construction of the proposed improvements. The work tasks to be performed include the following:

A. Incorporate Comments from Preliminary Plan Review and Field Exam

The CONSULTANT shall respond to comments resulting from the preliminary plan review and field exam. Recommended modifications shall be incorporated into the plan set. The CONSULTANT shall revise preliminary construction plans and special provisions to incorporate CITY and utility company comments.

B. Pre-Final Plans (95%)

Upon authorization from the CITY, the CONSULTANT shall proceed with the development of Pre-Final Plans. Upon completion of Pre-Final Plans, the design plans shall be approximately 95% complete. It is assumed that no geometric revisions to the roadway design shall occur after the start of the development of the Pre-Final Plans.

The CONSULTANT shall provide the CITY with the following deliverables:

Final Title Sheets (A Sheets) - This item consists of finalizing the title sheet. The title sheets shall include the following: Index of Sheets, Legend, Location Map, Project Number and Design Traffic Data.

Final Typical Sections and Details (B Sheets) - This item consists of final design and drafting of typical cross sections and standard details to be utilized for the improvements.

Final Estimate of Quantities and Tabulations (C Sheets) - This item consists of final bid items to be included in the Project, as well as final quantity tabulations, and the development of the general notes and estimate reference information. This item also includes the final design and drafting of erosion control measures to be provided on the Project.

Final Plan and Profiles (D Sheets) - This item consists of the final design and drafting of roadway plan and profile sheets, including the detail information required for plan approvals, permitting, and construction of the proposed improvements. This task also consists of the final design and drafting for the installation of

new utilities and utility adjustments that can be determined from coordination with the utility companies at the time of design.

Final Erosion Control Plan Sheets (EC Sheets) - This task consists of the development of erosion control sheets that show a draft pollution prevention plan, existing and proposed topography, location of proposed best management practices, and permanent surface restoration types.

Final Survey Reference Sheets (G Sheets) - This task consists of assembling reference ties to the plan control points and the benchmark data used to develop the plans and to be preserved throughout construction of the project. This task also includes preserving any Government Corners that are found in the vicinity of the proposed construction.

Final Right-of-Way Sheets (H Sheets) - This task consists of developing final permanent right-of-way sheets and permanent and temporary easement sheets required to construct the project.

Final Traffic Control and Staging Sheets (J Sheets) – This item consists of final design and drafting of the traffic control, staging and temporary pavement plans. The traffic control devices, procedures, and layouts shall be as per the requirements of the Iowa DOT and Manual on Uniform Traffic Control Devices (MUTCD).

Final Geometric, Staking and Jointing Sheets (L Sheets) - This item consists of the final design and drafting of jointing details, spot elevations, and geometric layouts for all non- typical pavement areas.

Final Pavement Marking and Traffic Signing Sheets (PM Sheets) – This item consists of final design and drafting of the pavement marking and traffic signing sheets. This task includes development of pavement marking and DOT traffic signing plans to be placed into service following construction. The traffic control devices, procedures, and layouts shall be as per the requirements of the Iowa DOT and Manual on Uniform Traffic Control Devices (MUTCD).

Final Earthwork Quantity Sheets (T Sheets) - This task consists of final design and drafting of the earthwork quantities.

Final Special Construction Detail Sheets (U Sheets) - This item consists of the final design and drafting of special project details not covered in other items. Included are such items as special grading details, channel grading, culvert details not included in the standard drawings, special storm sewer or manhole details not included in the standard drawings, special paving details, and other required miscellaneous details found to be required for completion of the project.

Final Bridge Plans (V Sheets) – Final bridge design shall be prepared for the SW 9th Street bridge over Middle Creek.

Final Plan Development: The CONSULTANT shall compile plan sheets, specifications, detailed quantities, and standard detail designs for submittal. Special detail designs in regards to aesthetic treatments to structures are not anticipated and are not considered part of this Scope of Services.

Quantity Calculations: The CONSULTANT shall identify the required bridge unit bid items and calculate quantities for each in accordance with the Iowa DOT Standard Specifications.

Final Cross-Sections (W Sheets) - This item consists of the final design and drafting of individual cross sections for the project. Cross sections shall be designed and drawn at 50-foot maximum intervals, with additional cross-sections included as necessary. Cross sections shall show the existing ground elevations as well as the final project grading, including fore slope and back slope information, special sub-grade treatments, ditches, pavement replacement, and other pertinent information.

Special Provision Development - The CONSULTANT shall prepare special provisions specifications for the project.

Opinion of Probable Construction Costs - The CONSULTANT shall prepare an updated Opinion of Probable Construction Cost at the time of completion of the final plans and specifications. The Opinion of Probable Construction Cost is intended for the use of the CITY in financing the Project.

Deliverables

- i. Electronic set of 95% plans
- ii. Electronic copy of CITY 60% design comments and how each comment was addressed
- iii. Opinion of Probable Construction Costs
- iv. Draft Special Provisions
- v. Pre-Final Plans (95%) Checklist

C. Final Plans (100%)

Upon authorization from the CITY, the CONSULTANT shall proceed with the development of Final Plans for the project. Upon completion, the design plans shall be 100% complete.

Incorporate Comments from Pre-Final Plan Review - The CONSULTANT shall respond to comments resulting from the Check Plan Review. Recommended modifications shall be incorporated into the final plan set.

Final Special Provisions - The CONSULTANT shall submit final special provisions incorporating any comments resulting from the Check Plan Review.

Opinion of Probable Construction Cost - Prepare opinion of probable construction cost for the project. Final cost opinion shall include all project elements. Published cost opinion should be rounded to the nearest \$1,000.

NBI Load Rating - Prepare load rating calculations for the proposed bridge structure. Load ratings shall be performed in accordance with the Iowa DOT Bridge Rating Manual. A rating report signed by a Professional Engineer shall be prepared for entering load rating information into SIIMS upon the initial bridge inspection.

Deliverables

- i. Complete set of Final Plans, in PDF format
- ii. Signed, sealed, and dated cover sheet, hardcopy
- iii. Final quantities and cost estimate, in Excel format
- iv. Special Provisions, in Word format
- v. All CADD drawings, in Microstation format with Iowa DOT symbology
- vi. Completed permits for IDNR NPDES, IDNR Flood Plain and USACE Section 404
- vii. Load Rating Report

D. Quality Control

Involve ongoing quality control input from the Project Development Team and the CONSULTANT's senior technical staff throughout the development of final plans. The CONSULTANT is responsible for making specific recommendations and ensuring that critical issues are discussed and resolved prior to submittal of the final plan set to the CITY.

5. LETTING PHASE SERVICES

The work tasks to be performed or coordinated by the CONSULTANT during the Bid Period Services are based upon letting the project one time and shall include the following:

A. Plan Clarification and Addenda

The bid letting shall be administered by the CITY. The CONSULTANT shall assist the CITY during the bid periods in answering questions regarding the design intent. The CONSULTANT shall address questions presented by the CITY and prepare addenda for distribution by the CITY, if required.

6. CONSTRUCTION ADMINISTRATION

After award of the construction contract, the CONSULTANT shall perform the following construction administration services.

A. Pre-construction Conference

The CONSULTANT shall attend/participate in a preconstruction conference with the Contractor, CITY, utility companies, affected entities and all interested parties to review the contract requirements, details of construction, utility conflicts and work schedule. Meeting minutes shall be prepared and distributed by the CONSULTANT.

B. Survey Control Monuments

Provide horizontal and vertical control for the CONTRACTOR's use during construction. Benchmarks shall be provided. Detailed construction staking shall be included in the construction contract to be done by the CONTRACTOR.

C. Shop Drawings

The CONSULTANT shall review the Contractor's shop drawings, samples, and other required data for compliance with the contract documents. The CONSULTANT shall evaluate and determine the acceptability of substitute materials and equipment proposed by the Contractor, and make a recommendation to the CITY regarding acceptance for the CITY's approval. The CONSULTANT shall have the authority to recommend special inspection or testing of the work to be conducted.

D. Design Interpretation

The CONSULTANT shall answer design interpretation questions from Engineer, CONTRACTOR, review agencies and utilities.

E. Change Order Preparation

The CONSULTANT shall issue necessary interpretations and clarifications of the plans, and in connection therewith assist the CITY in preparation of change orders as required.

If the CONTRACTOR requests a waiver of any provisions of the plans and specifications, the CONSULTANT shall make a recommendation on the request to the CITY for its determination. No waiver shall be granted if such waiver would serve to reduce the quality of the final product. The CITY shall never be deemed to have authorized the CONSULTANT to consent to the use of defective workmanship or materials.

F. Project Status Reports

During the Construction Services Phase, the CONSULTANT shall confer with the CITY to report project status and submit an electronic (PDF) summary report to the CITY for each site visit.

G. Site Visits

The CONSULTANT shall cause its design personnel to make periodic visits to the site at intervals appropriate to the stage of construction to ascertain the progress and quality of the work completed and to determine if the work is being performed in accordance with the Contract Documents. However, the CONSULTANT shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. Construction Administration services do not include responsibility for construction means, controls, techniques, sequences, procedures or safety.

For budgeting purposes, the CONSULTANT site visits are estimated to be one (1) site visit per week on average and 3 hours per visit for 16 weeks.

H. Notification of Nonconformance

On the basis of on-site observations as a design professional, the CONSULTANT shall keep the CITY informed of the progress and quality of the Work and shall guard the CITY against defects and deficiencies in the Work. The CONSULTANT shall notify the CITY of any work which is unsatisfactory, faulty, defective, incomplete or does not conform to the Contract Documents, advise and recommend action required to correct or complete such unsatisfactory, faulty, defective or incomplete work and, at the request of the CITY, see that these recommendations are implemented by the CONTRACTOR.

I. Substantial Completion – Punch List

The CONSULTANT shall participate in a site observation to determine if the Project is substantially complete in accordance with the plans and specifications and prepare a punch list of items to be completed prior to final completion and acceptance.

J. Final Inspection and Final Acceptance

The CONSULTANT shall participate in the CITY's final inspection. On the basis of site visits and participation in the final inspection, the CONSULTANT shall determine if the project is complete according to the plans and specifications and shall make a recommendation to the CITY regarding final payment and acceptance of the Project. It is understood that the CITY will accept the project only after recommendation by the CONSULTANT.

ATTACHMENT 2
FOTH INFRASTRUCTURE AND ENVIRONMENT, LLC
2020 STANDARD HOURLY RATE SCHEDULE

<u>CLASSIFICATION</u>	<u>HOURLY RATE</u>
Director	\$202
Project Manager	\$169.00-\$197.00
Project Scientist	\$117.00-\$143.00
Project Engineer	\$142.00-\$188.00
Staff Engineer	\$115.00-\$140.00
Planner	\$115.00-\$188.00
Technology Manager	\$164.00
Technician	\$80.00-\$142.00
Construction Manager	\$164.00
Land Surveyor	\$132.00-\$168.00
Project Administrator	\$78.00-\$98.00
Administrative Assistant	\$60.00

REIMBURSABLE EXPENSES

1. All materials and supplies used in the performance of work on this project shall be billed at costs.
2. Auto mileage shall be reimbursed per the standard mileage reimbursement established by the Internal Revenue Service. Service vehicle mileage shall be reimbursed on the basis of \$0.88 per mile.
3. Charges for outside services such as geotechnical soil borings and materials testing and all other direct expenses shall be invoiced at costs.