

**BOARD OF PUBLIC WORKS AND SAFETY
Agenda Request Form**

(Form B-01-2012)

Organizations and individuals are asked to submit a request form and supporting documents to be placed on the agenda. You will be contacted by the City confirming the date of the meeting in which your request will be heard. Please make sure that your contact information is accurate in case we need to get in touch with you. The Board of Works meets on the 1st and 3rd Monday of each month at 5:00 p.m. in City Hall located at 70 E. Monroe Street.

Date Submitted:	July 12, 2019	Meeting Date:	July 15, 2019
Contact Information:			
Requested by:	Mark Richards		
On Behalf of Organization or Individual: Department of Planning & Engineering			
Telephone:	317-736-3631		
Email address:	mrichards@franklin.in.gov		
Mailing Address:	70 E. Monroe Street, Franklin, IN 46131		
Describe Request:			
Request approval of Supplement No. 1 to Professional Services Agreement with CrossRoad Engineers for inspection of Forsythe Street Project.			
List Supporting Documentation Provided:			
Supplement No. 1 to Professional Services Agreement Fee Proposal			
Who will present the request?			
Name:	Mark Richards	Telephone:	317-736-3631

In order for an individual and/or agency to be considered for new business on the Board of Works agenda, this reservation form and supporting documents must be received in the Mayor's office no later than 4:00 p.m. on the Wednesday before the meeting.

SUPPLEMENTAL AGREEMENT NO. 1

This supplemental agreement is made and entered into _____, _____, by and between the CITY OF FRANKLIN, INDIANA, acting by and through its proper officials (hereinafter referred to as "OWNER") and CROSSROAD ENGINEERS, PC (hereinafter referred to as the "CONSULTANT").

WITNESSETH

WHEREAS, OWNER and the CONSULTANT did, on March 4, 2019, enter into a contract for professional services necessary for The Forsythe and Hamilton Sewer and Roadway Replacement project ("Project").

WHEREAS, OWNER desires the CONSULTANT to provide additional professional services necessary for full-time construction observation.

WHEREAS, in order to provide for completion of the work, it is necessary to amend and supplement the contract.

NOW, THEREFORE, it is agreed by and between the parties as follows:

1. SECTION IV COMPENSATION is amended to read as follows:

For all Services rendered by CONSULTANT under this Agreement, in accordance with the terms of this Agreement, OWNER shall pay the CONSULTANT in accordance with the fees and charges established in EXHIBIT 4, which is attached to this Agreement, and incorporated herein by reference. The CONSULTANT shall be paid by third party Amphenol Corporation which has agreed to pay all costs associated with CONSULTANT's services. The terms of payment of said compensation is as set forth on Exhibit 4. Compensation for the services rendered shall not exceed the sum of \$267,200 without specific written authorization of OWNER prior to incurring the charge.

2. EXHIBIT 4 FEE SCHEDULE is revised and attached to this Supplemental.
3. Except as herein modified, changed and supplemented, all terms of the original contract dated March 4, 2019 shall continue in full force and effect.

Non Collusion - The undersigned attests, subject to the penalties for perjury, that he/she is the contracting party, or that he/she is the representative, agent, member or officer of the contracting party, that he/she has not, nor has any other member, employee, representative, agent or officer of the firm, company, corporation or partnership represented by him/her, directly or indirectly, to the best of his/her knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he/she has not received or paid any sum of money or other consideration for the execution of this agreement other than that which appears upon the face of the agreement.

In Witness Whereof, the CONSULTANT and the OWNER have, through duly authorized representatives, entered into this Contract. The parties having read and understand the forgoing terms of this Contract do by their respective signatures dated below hereby agree to the terms thereof.

CROSSROAD ENGINEERS, PC
(CONSULTANT)



Trent E. Newport, President

CITY OF FRANKLIN
BOARD OF PUBLIC WORKS AND SAFETY
FRANKLIN, INDIANA
(OWNER)

Steve Barnett, Mayor

Melissa Jones, Member

Robert Swinehamer, Member

Attest:



Walter E. Charles, CEO

Attest:

Jayne W. Rhoades, Clerk-Treasurer

ATTACHMENT “A”

FEE SCHEDULE

A.	TOPOGRAPHIC SURVEY & ROUTE SURVEY	\$ 16,000.00
B.	ROAD DESIGN & PLAN PREPARATION	\$ 34,000.00
C.	UTILITY COORDINATION	\$ 10,000.00
D.	REGULATORY SUBMITTALS & BIDDING PHASE	\$ 10,000.00

TOTAL DESIGN FEE	\$ 70,000.00
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E.	CONSTRUCTION STAKING, INSPECTION,	\$ 75,000.00
	& AS-BUILT PLANS (<i>Hourly Not-to-Exceed</i>)	\$ 197,200.00

TOTAL ESTIMATED PROJECT FEE	\$ 145,000.00
	\$ 267,200.00

Our total lump sum proposed fee is divided into the above work components for billing purposes.

June 24, 2019

Mr. Mark Richards, City Engineer
70 E. Monroe Street
Franklin, Indiana 46131



Re: Reconstruction of Forsythe Street
Hurricane Creek to Hamilton Avenue
Contract Supplemental Request for Construction Inspection

Dear Mark:

In February, when we were preparing our fee proposal for the design of this project, we made note that a not-to-exceed budget amount for construction inspection would be determined once the design was complete. Using our past history on the other smaller street / parking lot construction projects in which we have been involved that were locally funded, we used an estimate of \$75,000 at that time. However, unlike those other projects, due to the nature of the construction activities required, this project will require us to provide full-time inspection services for the entire construction duration. So, the original estimate for the inspection budget will need to be increased. We have prepared this request to supplement our existing contract to allow us to provide full-time construction inspection services.

Below is a listing of individuals we expect to be using on this project:

Trent E. Newport	Director
Brad Stahley	Resident Project Representative
Charlie Mattox	Project Inspector
To Be Named	Assistant Project Inspectors
To Be Named	CADD Technicians (As Builts)

The duration is expected to extend from August through November of this year, plus a month next spring. During the period of time when the construction is occurring (estimated 17 weeks in 2019; 4 weeks in 2020), we have budgeted 4 hours per week for the Director, 24 hours per week for the Resident Project Representative and 50 hours per week for the Project Inspector. Once the construction has been completed next spring, we will prepare the final construction record and as-built plans. These budgeted hours, with the corresponding billing rates, yield the estimated costs shown on the attached spreadsheet. This supplemental request does not include construction staking services.

If you should have any questions or need any further information, please call me.

Sincerely,

CrossRoad Engineers, PC

A handwritten signature in black ink, appearing to read "Trent E. Newport", is written over the printed name.

Trent E. Newport, P. E.
President



Reconstruction of Forsythe Street
Hurricane Creek to Hamilton Avenue
City of Franklin
Estimated Costs for Construction Inspection

ACTIVITY		DIR	RES PROJ REP	PROJ INSP	ASST PROJ INSP	CADD TECH
Const Duration (2019)	17 wks	68	408	850	0	0
Const Duration (2020)	4 wks	16	96	200	0	0
Complete Final Record	4 wks	4	16	40	0	4
TOTAL HOURS		88	520	1090	0	4

The proposed fee for these estimated hours is as follows:

DIRECT LABOR COSTS --

<u>Personnel Class</u>	<u>Billing Rate</u>	<u>Direct Labor Costs</u>
Director (2019)	\$155.00	\$10,540.00
Director (2020)	\$160.00	\$3,200.00
Resident Proj. Rep. (2019)	\$120.00	\$48,960.00
Resident Proj. Rep. (2020)	\$125.00	\$14,000.00
Project Inspector (2019)	\$100.00	\$85,000.00
Project Inspector (2020)	\$105.00	\$25,200.00
Asst. Proj. Inspector (2019)	\$80.00	\$0.00
Asst. Proj. Inspector (2020)	\$80.00	\$0.00
CADD Technician (2020)	\$90.00	<u>\$360.00</u>
TOTAL DIRECT LABOR COSTS		\$187,260.00

DIRECT NON - LABOR COSTS --

MILEAGE		<u>Direct Non-Labor Costs</u>
Budgeted mileage rate is	\$0.52 /mile	
Director	50 miles/wk x 21 weeks	\$546.00
Resident Proj. Rep.	150 miles/wk x 21 weeks	\$1,638.00
Proj. Inspector	250 miles/wk x 21 weeks	\$2,730.00
Asst. Proj. Inspector	0 miles/wk x 21 weeks	\$0.00
ON-SITE MATERIALS TESTING		\$5,000.00
See attached on-site material testing proposal from Earth Exploration		
		<u>\$9,914.00</u>
TOTAL ESTIMATED COSTS		\$197,174.00
USE		\$197,200.00



7770 West New York Street
Indianapolis, IN 46214
(317) 273 1690
(317) 273 2250 (FAX)

June 19, 2019

Mr. Chip Charles, P.E.
Project Manager
Crossroad Engineers, PC
3417 Sherman Drive
Beech Grove, Indiana 46107

Re: Cost Estimate for Professional Services
Construction Observation and Testing Services
Forsythe Street Improvements
Franklin, Indiana
Terracon Proposal No. PCJ191099

Mr. Charles:

We appreciate the opportunity to submit a cost estimate for construction observation and materials testing services for the referenced project. We understand the scope of our services shall include observations and materials testing services for the sanitary sewer replacement and reconstruction of Forsythe Street located in Franklin, Indiana.

Scope of Services

We further understand our services will only include Dynamic Cone Penetrometer (DCP) and Light Weight Deflectometer (LWD) testing on soils and aggregates placed as structural fill during the utility replacement and the subgrade/subbase reconstruction of Forsythe Street. Additionally, all daily inspection reports will DCP and LWD test results for the material that was tested and any deficiencies or failing test results will be immediately communicated to the onsite Crossroad Engineers Resident Project Representative.

Estimated Budget

We have reviewed the project drawings in order to provide an approximate estimate of our cost involvement with the work. Based on our understanding of what our involvement will be with the project and the anticipated units and durations that were provided to us by Crossroad Engineers, we propose an estimated budget of **\$5,000.00** to be billed on a time and expense basis in accordance with the estimated units provided and the unit rates attached within this proposal. Billing of our services will be made on a monthly basis according to the attached Unit Rate Fee Schedule. Please understand, we will make all attempts necessary to be prudent with our time and associated cost involvement with the work.

Construction Observation and Testing Services
Forsythe Street Improvements ■ Franklin, IN
June 19, 2019 ■ Terracon Proposal No. PCJ191099



Closing

Once again, we appreciate the opportunity to propose our Construction Observation and Testing Services services to Crossroad Engineers, PC for the Forsythe Street Improvements project. Should you have any questions or if we could be of further assistance, please call us at your convenience.

Sincerely,

EARTH EXPLORATION, INC., A TERRACON COMPANY

Jeremy S. Clem
Senior Project Manager
Construction Materials Group

Attachments: Construction Services Unit Rate Fee Schedule
Estimated Budget Summary
Terms and Conditions

TERRACON CONSTRUCTION MONITORING UNIT RATE FEE SCHEDULE
Forsythe Street Improvements - Franklin, Indiana - Crossroad Engineers, PC
Terracon Proposal No.: PCJ191099

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>
C-1	Personnel for Consultation, Monitoring or Report Writing Including Travel Time	
A.	Construction services and project managers, per hour	\$100.00
B.	Special testing and observations (e.g., structural steel, welds, pavement subgrades)	100.00
C.	Soils engineer, P.E., per hour	95.00
D.	Senior project engineer, P.E., per hour	105.00
E.	Principal engineer, P.E., per hour	175.00
F.	Special consulting, per hour	175.00
C-2	Engineering Technician for Performing Field Testing, Sampling or Monitoring Including Travel Time	
A.	Regular time, (4 hour minimum), per hour	42.00
B.	Overtime - over 8 hours per day, after 5:00 p.m. and Saturday, per hour	63.00
C.	Sundays and holidays, per hour	63.00
	(Technician certified by American Concrete Institute, INDOT and Troxler Electronic Laboratories)	
C-3	Secretarial, per hour	40.00
C-4	Soil/Aggregate Testing	
A.	Standard Proctor (ASTM D-698), per each	135.00
B.	Modified Proctor (ASTM D-1557), per each	150.00
C.	Verification of Proctor results (1 point), per each	60.00
D.	Sieve analysis with decantation (coarse aggregate), per each	140.00
E.	Sieve analysis with decantation (fine aggregate), per each	120.00
F.	Special sample preparation, per hour	60.00
C-5	Concrete Testing	
A.	Compressive strength testing of 4" X 8" concrete cylinders, per each	15.00
B.	Compressive strength testing of 2" X 2" cubes, per each	15.00
C.	Compressive strength testing of 3" X 3" grout prisms, per each	15.00
D.	Flexural strength testing of 6" X 6" X 21" concrete beams, per each	35.00
C-6	Asphalt Testing	
A.	Unit weight of asphaltic concrete cores, per each	35.00
B.	Asphalt extraction and gradation, per each	185.00
C.	Asphalt Marshall stability, flow and density (3 points per test), per test	285.00
D.	Certified Bituminous Technician (sampling and testing at batch plant), per hour	75.00
C-7	Fireproofing Testing	
A.	Density (Dry-back and Dimensions) ASTM E605, per test	30.00
B.	Adhesion/Cohesion (ASTM E736), per test	30.00
C-8	Special Equipment	
A.	Nuclear moisture-density gauge, per site visit	60.00
B.	Concrete/asphalt coring machine, per site visit	175.00
C.	Light Weight Defelctometer, per site visit	75.00
D.	Torque wrench (600 ft-lb), per site visit	50.00
E.	Dynamic cone penetrometer, per site visit	60.00
C-9	Reimbursable Expenses	
A.	Overnight living expenses, per person per day	100.00
B.	Per diem, per person per day	40.00
C.	Mileage for all personnel (company or private vehicle), per mile	0.64
C-10	General	
A.	All work must be authorized by a purchase order or letter of authorization.	
B.	Unit prices will remain in effect for 60 days from date of quotation.	
C.	Invoices submitted for payment are due within 30 days of the invoice date unless another payment schedule has been agreed upon prior to commencing the work.	
D.	Invoices will be submitted once a month for services provided during that month.	
E.	A service charge of 1½% per month (18% per year) will be added to all past due accounts.	

CONSTRUCTION SERVICES AND MATERIALS TESTING COST ESTIMATE
Forsythe Street Improvements
Franklin, Indiana
Terracon Proposal No.: PCJ191099
FIELD TESTING AND OBSERVATION SERVICES

Field Density/Soil Testing

Utility Backfill/Roadway Improvements	9 days	8 hrs/day	\$42.00 / hr	\$3,024.00
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Subtotal **\$3,024.00**

LABORATORY TESTING SERVICES

Moisture-Density Relations (Proctors)

Fine Grained - Standard	1		\$135.00 / ea	\$135.00
Granular - Standard	1		\$135.00 / ea	\$135.00

Subtotal **\$270.00**

EQUIPMENT AND TRANSPORTATION

<u>Dynamic Cone Penetrometer</u>	6 days		\$60.00 / day	\$360.00
<u>Light Weight Deflectometer</u>	6 days		\$60.00 / day	\$360.00
<u>Transportation</u>	9 trips	68 mi/trip	\$0.64 /mile	\$391.68

Subtotal **\$1,111.68**

ENGINEERING AND ADMINISTRATION

<u>Project Manager</u>	5 hrs		\$100.00 / hr	\$500.00
<u>Secretarial</u>	2 hrs		\$40.00 / hr	\$80.00

Subtotal **\$580.00**

Estimated Total Cost **\$4,985.68**