

Municipality City of Aurora	<b>L O C A L  A G E N C Y</b>	 <b>Illinois Department of Transportation</b>  <b>Preliminary/Construction Engineering Services Agreement For Motor Fuel Tax Funds</b>	<b>C O N S U L T A N T</b>	Name Engineering Enterprises, Inc.
Township				Address 52 Wheeler Road
County Will				City Sugar Grove
Section 17-00318-00-CH				State Illinois

THIS AGREEMENT is made and entered into this 13th day of August, 2019 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above PROJECT. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

<b>Regional Engineer</b>	Deputy Director Division of Highways, Regional Engineer, Department of Transportation
<b>Resident Construction Supervisor</b>	Authorized representative of the LA in immediate charge of the engineering details of the PROJECT
<b>Contractor</b>	Company or Companies to which the construction contract was awarded

#### Section Description

Name Eola Road Realignment Route \_\_\_\_\_ Length 1.217 miles Structure No. \_\_\_\_\_  
Termini US Route 30 to School Drive

#### Description

The proposed construction improvements of this project includes the removal of existing Heggs Road from Lundquist Drive to US 30 and the construction of Eola Road on a new alignment from Lundquist Drive to US 30. This includes the removal of the existing unsignalized intersection of Heggs Road and US 30, and the construction of a new signalized intersection of Eola Road and US 30.

#### Agreement Provisions

#### The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA in connection with the proposed improvement herein before described, and checked below:
  - a.  Make such detailed surveys as are necessary for the preparation of detailed roadway plans.
  - b.  Make stream and flood plain hydraulic surveys and gather high water data and flood histories for the preparation of detailed bridge plans.
  - c.  Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
  - d.  Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.

- e.  Prepare Army Corps of Engineers Permit, Division of Water Resources Permit, Bridge waterway sketch and/or Channel Change sketch, Utility plan and locations and Railroad Crossing work agreements.
- f.  Prepare Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.

**NOTE** Four copies to be submitted to the Regional Engineer

- g.  Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
- h.  Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easements and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
- i.  Assist the LA in the receipt and evaluation of proposals and the awarding of the construction contract.
- j.  Furnish or cause to be furnished:
  - (1) Proportioning and testing of concrete mixtures in accordance with the "Manual of Instructions for Concrete Proportioning and Testing" issued by the Bureau of Materials and Physical Research, of the DEPARTMENT and promptly submit reports on forms prepared by said Bureau.
  - (2) Proportioning and testing of bituminous mixtures (including extracting test) in accordance with the "Manual of Instructions for Bituminous Proportioning and Testing" issued by the Bureau of Materials and Physical Research, of the DEPARTMENT, and promptly submit reports on forms prepared by said Bureau.
  - (3) All compaction tests as required by the specifications and report promptly the same on forms prepared by the Bureau of Materials and Physical Research.
  - (4) Quality and sieve analyses on local aggregates to see that they comply with the specifications contained in the contract.
  - (5) Inspection of all materials when inspection is not provided at the sources by the Bureau of Materials and Physical Research, of the DEPARTMENT and submit inspection reports to the LA and the DEPARTMENT in accordance with the policies of the said DEPARTMENT.
- k.  Furnish or cause to be furnished
  - (1) A resident construction supervisor, inspectors, and other technical personnel to perform the following work: (The number of such inspectors and other technical personnel required shall be subject to the approval of the LA.)
    - a. Continuous observation of the work and the contractor's operations for compliance with the plans and specifications as construction proceeds, but the ENGINEER does not guarantee the performance of the contract by the contractor.
    - b. Establishment and setting of lines and grades.
    - c. Maintain a daily record of the contractor's activities throughout construction including sufficient information to permit verification of the nature and cost of changes in plans and authorized extra work.
    - d. Supervision of inspectors, proportioning engineers and other technical personnel and the taking and submitting of material samples.
    - e. Revision of contract drawings to reflect as built conditions.
    - f. Preparation and submission to the LA in the required form and number of copies, all partial and final payment estimates, change orders, records and reports required by the LA and the DEPARTMENT.
    - g. Other tasks as shown in the attached scope of services ('Exhibit 1').

**NOTE: When Federal funds are used for construction and the ENGINEER or the ENGINEER's assigned staff is named as resident construction supervisor, the ENGINEER is required to be prequalified with the STATE in Construction Inspection. The onsite resident construction supervisor and project inspectors shall possess valid Documentation of Contract Quantities certification.**

2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to this agreement will be in accordance with the current standard specifications and policies of the DEPARTMENT, it being understood that all such reports, plats, plans and drafts shall before being finally accepted, be subject to approval by the LA and the said DEPARTMENT.
3. To attend conferences at any reasonable time when requested to do so by the LA or representatives of the DEPARTMENT.
4. In the event plans, surveys or construction staking are found to be in error during the construction of the PROJECT and revisions of the plans or survey or construction staking corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the contractor.
5. The basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this agreement will be made available upon request to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
6. To make such changes in working plans, including all necessary preliminary surveys and investigations, as may be required after the award of the construction contract and during the construction of the improvement.
7. That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.
8. To submit, upon request by the LA or the DEPARTMENT a list of the personnel and the equipment he/she proposes to use in fulfilling the requirements of this AGREEMENT.

**The LA Agrees,**

1. To pay the Engineer as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 1j, 1k, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:
  - a.  A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
  - b.  A sum of money equal to the percentage of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees	
Under \$50,000	_____	(see note)
	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

- c.  Cost-Plus Fixed Fee (CPFF) on the basis of the following compensation formula in an amount not to exceed as shown on 'Exhibit 2':

$$FF = 14.5\%[DL + R(DL) + OH(DL) + IHDC]$$

Where:

DL = Direct Labor

IHDC = In-House Direct Costs

OH = Overhead

R = Complexity Factor

FF=Fixed Fee

ODC = Outside Direct Costs

SBO = Services by Others

$$\underline{\text{Total Compensation} = DL + IHDC + OH(DL) + FF + ODC + SBO}$$

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, ~~1j and 1k~~ of THE ENGINEER AGREES at the hourly rates stipulated below for personnel assigned to this PROJECT as payment in full to the ENGINEER for the actual time spent in providing these services the hourly rates to include profit, overhead, readiness to serve, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under

paragraphs 1b, 1c, 1d, 1e, 1f, 4j and 4k of THE ENGINEER AGREES. If the ENGINEER sublets all or a part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge. "Cost to ENGINEER" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm including the Principal Engineer perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

<b>Grade Classification of Employee</b>	<b>Hourly Rate</b>
Principal Engineer	_____
Resident Construction Supervisor	_____
Chief of Party	_____
Instrument Man	_____
Rodmen	_____
Inspectors	_____

The hourly rates itemized above shall be effective the date the parties, hereunto entering this AGREEMENT, have affixed their hands and seals and shall remain in effect until \_\_\_\_\_. In event the services of the ENGINEER extend beyond \_\_\_\_\_, the hourly rates will be adjusted yearly by addendum to this AGREEMENT to compensate for increases or decreases in the salary structure of the ENGINEER that are in effect at that time.

3. That payments due the ENGINEER for services rendered pursuant to this AGREEMENT will be made as soon as practicable after the services have been performed, in accordance with the following schedule:
  - a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee based on the above fee schedule and the approved estimate of cost.
  - b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee (excluding any fees paragraphs 1j and 1k of the ENGINEER AGREES), based on the above fee schedule and the awarded contract cost, less any previous payment.
  - c. Upon completion of the construction of the improvement, 90 percent of the fee due for services stipulated in paragraphs 1j and 1k.
  - d. Upon completion of all final reports required by the LA and the DEPARTMENT and acceptance of the improvement by the DEPARTMENT, 100 percent of the total fees due under this AGREEMENT, less any amounts previously paid.

By mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.

4. That should the improvements be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a and 1g, and prior to the completion of such services the LA shall reimburse the ENGINEER for his actual costs plus \_\_\_\_\_ percent incurred up to the time he is notified in writing of such abandonment "actual cost" being defined as material costs plus actual payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost.
5. That should the LA require changes in any of the detailed plans, specifications or estimates (except for those required pursuant to paragraph 4 of THE ENGINEER AGREES) after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus \_\_\_\_\_ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 4 above. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans.
6. That should the LA extend completion of the improvement beyond the time limit given in the contract, the LA will pay the ENGINEER, in addition to the fees provided herein, his actual cost incurred beyond such time limit - "actual cost" being defined as in paragraph 4 above.
7. To submit approved forms BC 775 and BC 776 with this AGREEMENT when federal funds are used for construction.

**It is Mutually Agreed,**

1. That any difference between the ENGINEER and the LA concerning the interpretation of the provisions of this AGREEMENT shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all drawings, specifications, partial and completed estimates and data if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under the AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized offices.

Executed by the LA:

City of Aurora of the  
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its City Council

By \_\_\_\_\_  
\_\_\_\_\_  
City Clerk

By Jolene Coulter

(Seal)

Title: Director of Purchasing

Executed by the ENGINEER:

Engineering Enterprises, Inc.

52 Wheeler Road

ATTEST:

Sugar Grove, IL 60554

By Angie Smith

[Signature]

Title: Executive Assistant/Marketing Coordinator

Title: Vice President

<b>Approved</b>
_____
Date
Department of Transportation
_____
Regional Engineer

**City of Aurora**  
**Eola Road Realignment**  
**Section Number 17-00318-00-CH**  
**Exhibit 1**  
**Phase III Construction Engineering Scope of Services**

The Consulting Engineer shall perform and carry out, in a professional and satisfactory manner, the necessary services required to complete the requirements included in this project. All work must adhere to City and IDOT standards.

The Phase III Construction Engineering services consist of the following:

Preconstruction Tasks

- Conduct a local preconstruction meeting with all interested parties to discuss goals, objectives, and issues that the City may have. Submit agenda and meeting minutes to the City for review and approval.
- Familiarize themselves with all project permits and requirements needed for construction.
- Review the plans and specifications in depth, verifying quantities, elevations and dimensions relevant to the project. Also, anticipate any potential conflicts or issues and develop solutions prior to construction.
- Review contractor's proposed construction schedule for compliance with contract. Submittals should be included on this schedule as well as all major subcontractors.
- Set up all forms of proper project documentation.

Construction Tasks

- Provide a full time resident engineer and supplemental staff as needed for required daily activities such as: observing the progress and quality of the work and determining if the work is proceeding in accordance with the contract documents. Maintain site presence at all times when the contractor is working. Disapprove any work failing to conform to the contract documents and immediately inform City and IDOT representatives. Verify that there are no deviations from the contract documents unless authorized by City and IDOT representatives.
- Maintain submittal log and check status to ensure timely approval.
- Maintain orderly files of all relevant project documents so that they can be easily accessed.
- Perform quantity measurements to prepare pay estimates and change orders to review with contractor and submit to City.
- Hold weekly progress meetings, if required.
- Provide liaison functions related to coordination of contractors, utilities, developers, other agencies and property owners engaged or affected by the project.
- Check and approve project submittals for compliance with standards. Forward recommendations to the City and IDOT representatives.
- Maintain daily contact with contractor to monitor schedule and recommend actions that should be taken if falling behind.
- Maintain daily contact with the utility companies and their contractors to monitor concurrence with proposed schedules.
- Maintain daily contact with the City representatives to inform on all relevant project information.

- Inspect, document, and inform the contractor and the City of the adequacy of the establishment and maintenance of traffic control. Perform all necessary traffic control checks. Document deficiencies and contractor responses to notices of the same. Inform City and IDOT of deficiencies and if contractor does not correct or enforce as contract stipulates.
- Provide construction layout per IDOT's Recurring Special Provision Check Sheet #10.
- Provide Quality Assurance (QA) services in accordance with IDOT QC/QA practices and procedures (contractor will provide QC). Provide necessary coordination and qualified personnel to perform work for all materials. Obtain and test soil, asphalt, concrete, and aggregate samples to perform necessary testing to fulfill QA/geotechnical requirements. Reports shall be prepared in a timely manner and coordinated with QC data. The consultant shall fulfill the requirements as the QA manager.
- Prepare minutes for all meetings and distribute to appropriate parties.
- Maintain set of working drawings as construction is progressing.
- Provide all necessary equipment, instruments, supplies, transportation, and personnel required to perform duties of the project team.
- Maintain and periodically transmit to contractor a running punch list to expedite project close out.
- Obtain material acceptance certifications as materials are incorporated into the project to expedite project closeout. Withhold payment until material inspection and certifications are provided.
- Monitor and enforce all OSHA safety regulations are followed by the consultant staff and sub-consultants.
- Monitor and document erosion control and ensure conformity with the plans and standards.
- Provide project administration and management.
- Provide other work tasks as assigned by the City.
- Bill the City regularly on the BLR 05621 form (Local Agency Cost Plus Fixed Fee Invoice) and assist the City in providing any documentation required to be reimbursed from IDOT (such as certified time sheets). The City will handle the reimbursement requests.

#### Post Construction Tasks

- Perform final inspection with the IDOT, the City representative, contractor, and all applicable utilities to finalize punch list. Document the items in the final punch list and submit them to the contractor for close out. Verify completion of all work and provide a recommendation to City.
- Prepare record drawings. Submit the drawings in a hard copy and digital form.
- Verify that all documentation is accomplished and that all material inspections and certifications have been accounted for and are complete. Complete all forms and any other requirements necessary to process an IDOT MFT Construction Section project in Phase III as required by IDOT.
- Close out project with IDOT within a reasonable time frame after all construction is completed.
- Complete all forms and other requirements necessary to process an IDOT MFT Construction Section including:
  - Four (4) Copies of the BLR 13231: Engineer's Final Payment
  - Four (4) Copies of the BLR 13210: Request for Approval of Change in Plans
    - Add justification for any pay items over \$10,000, T&M Work or AUPs
  - One (1) Copy of the Letter of Acceptance on City letterhead
  - One (1) Copy of the Material Certification Letter To Be Signed and Stamped by P.E. (EEI)
  - Four (4) Copies of the BLR 13510: Final Report of Improvement Constructed Under the Illinois Highway Code

**PAYROLL ESCALATION TABLE  
FIXED RAISES**

FIRM NAME  
PRIME/SUPPLEMENT

Engineering Enterprises, Inc.  
Prime

DATE 07/18/19  
PTB NO. \_\_\_\_\_

CONTRACT TERM 10 MONTHS  
START DATE 7/22/2019  
RAISE DATE 2/21/2020

OVERHEAD RATE 187.44%  
COMPLEXITY FACTOR 0  
% OF RAISE 3.00%

**ESCALATION PER YEAR**

7/22/2019 - 2/21/2020
7 ----- 10

2/22/2020 - 5/21/2020
3 ----- 10

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= 70.00%  
= 1.0090

30.90%

**The total escalation for this project would be:**

**0.90%**



**PAYROLL RATES**

FIRM NAME Engineering Enterprises DATE 07/18/19  
 PRIME/SUPPLEMENT Prime  
 PSB NO. \_\_\_\_\_

ESCALATION FACTOR 0.90%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
E-4 Senior Principal	\$80.53	\$81.25
E-3 Principal	\$59.86	\$60.40
E-2 Senior Project Manager	\$54.55	\$55.04
E-1 Project Manager	\$44.82	\$45.22
P-6 Sr. Project Engineer/Planner/Surveyor II	\$42.84	\$43.23
P-5 Sr. Project Engineer/Planner/Surveyor I	\$37.09	\$37.42
P-4 Project Engineer/Planner/Surveyor	\$30.28	\$30.55
T-6 Sr. Project Technician II	\$40.19	\$40.55
T-5 Sr. Project Technician I	\$35.83	\$36.15
T-2 Technician	\$24.21	\$24.43
I-1 Engineering/Land Surveying Intern	\$16.33	\$16.48
G-1 GIS Technician	\$23.08	\$23.29
A-3 Administrative Assistant	\$27.13	\$27.37
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00



### AVERAGE HOURLY PROJECT RATES

**FIRM** Engineering Enterprises, Inc.  
**PSB** \_\_\_\_\_  
**PRIME/SUPPLEMENT** Prime  
 City of Aurora \_\_\_\_\_  
 Section 17-00318-00-CH Eola Road Realignment

DATE 07/18/19

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Project Management & Co			Precon & Status Meeting			Construction Layout			Construction Observation			Material Testing		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
E-4 Senior Principal	81.25	0																	
E-3 Principal	60.40	6	0.42%	0.26	4	4.26%	2.57	2	7.69%	4.65									
E-2 Senior Project Manager	55.04	20	1.41%	0.78															
E-1 Project Manager	45.22	234	16.50%	7.46	90	95.74%	43.30	24	92.31%	41.74	12	75.00%	33.92						
P-6 Sr. Project Engineer/Planner/Surveyor II	43.23	0																	
P-5 Sr. Project Engineer/Planner/Surveyor I	37.42	968	68.27%	25.55							4	25.00%	9.36	920	83.64%	31.30	4	100.00%	37.42
P-4 Project Engineer/Planner/Surveyor	30.55	180	12.69%	3.88										180	16.36%	5.00			
T-6 Sr. Project Technician II	40.55	10	0.71%	0.29															
T-5 Sr. Project Technician I	36.15	0																	
T-2 Technician	24.43	0																	
I-1 Engineering/Land Surveying Intern	16.48	0																	
G-1 GIS Technician	23.29	0																	
A-3 Administrative Assistant	27.37	0																	
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<b>TOTALS</b>		1418	100%	\$38.21	94	100.00%	\$45.87	26	100%	\$46.39	16	100%	\$43.27	1100	100%	\$36.30	4	100%	\$37.42



**SUMMARY OF DIRECT COSTS**  
**Eola Realignment - City of Aurora**  
**Will County**  
**Section No. 17-00318-00-CH**

**Engineering Enterprises, Inc.**

<b>In-House Direct Costs</b>	<b>No.</b>	<b>Unit</b>	<b>Cost/Unit</b>	<b>Total Cost</b>
Printing/Reports	400	Pages	\$0.10	\$40.00
Printing/Plans	208	Sheets	\$1.00	\$208.00
Vehicle	92	Days	\$65.00	\$5,980.00
Subtotal				\$6,228.00
<b>Outside Direct Costs</b>	<b>No.</b>	<b>Unit</b>	<b>Cost/Unit</b>	<b>Total Cost</b>
Postage/Overnight Delivery	0	Each	\$15.00	\$0.00
Subtotal				\$0.00
<b>TOTAL</b>				<b>\$6,228.00</b>