

Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation Preliminary Construction Engineering Services Agreement For Non-Motor Fuel Tax Funds	C O N S U L T A N T	Name
Township				Material Solutions Laboratory
County Lake County Div. of Transportation				Address 1040 Bonaventure Drive
Section 14-00000-05-EG				City Elk Grove Village
				State IL

THIS AGREEMENT is made and entered into this _____ day of _____, 2014 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above PROJECT. Non-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:

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

Section Description

Name Material Inspection '14 Route _____ Length _____ miles Structure No. _____

Termini _____

Description
Material Inspection 2014 - various projects

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: **Services as included and/or defined in the attached Scope of Services.**
 - (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.

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 & LA, it being understood that all such reports, ~~plans, plats 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, 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.~~

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. **Additionally, services provided will be according to the attached Project Unit Rates.** 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, 1j and 1k 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.

**Grade Classification
of Employee**

Hourly Rate

Project Manager	\$171.10
QC/QA Technician Level I	\$84.22
QC/QA Technician Level II	\$98.86
QC/QA Technician Level III	\$106.26
Sample Pick-Up Technician	\$65.51
Documentation Engineer	\$70.33
_____	_____
_____	_____
_____	_____
_____	_____

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 3/1/2015. ~~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.~~

The Total Not-to Exceed Contract Amount shall be \$70,032.95 as outlined in MSL's Cost Estimate.

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:~~
- ~~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.~~
 - ~~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.~~
 - ~~Upon completion of the construction of the improvement, 90 percent of the fee due for services stipulated in paragraphs 1j and 1k.~~
 - ~~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 **triplicate** counterparts, each of which shall be considered as an original by their duly authorized offices.

Executed by the LA:

County of Lake _____ of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

County Board _____ ,

Lake County _____ Clerk

By _____

(Seal)

Title: Chairman of the County Board

RECOMMENDED FOR EXECUTION

Paula J. Trigg, P.E.
Director of Transportation, County Engineer
Lake County

Executed by the ENGINEER:

Material Solutions Laboratory

1040 Bonaventure Drive

ATTEST:

Elk Grove Village, IL 60007

By _____

Title: President

Title: Principal

Note: Three (3) Original Executed Contracts – (2) Lake County; (1) Consultant



2014 Lake County Material Testing Cost Estimate

Hot Mix Asphalt Testing

Description	Hours/Units	Rate	Cost
Project Manager	8	\$171.10	\$1,368.80
Documentation Engineer	20	\$70.33	\$1,406.60
Sample Pick-up Technician	40	\$65.51	\$2,620.40
Core Density	45	\$60.00	\$2,700.00
Reflux Extraction	20	\$230.00	\$4,600.00
Reflux Extraction (HMA w/ RAS)	20	\$350.00	\$7,000.00
HMA Void Testing	40	\$400.00	\$16,000.00
Sub Total:			\$35,695.80

*HMA Testing was based on 40 samples per RFP

Concrete Testing

Description	Hours/Units	Rate	Cost
Project Manager	4	\$171.10	\$684.40
Documentation Engineer	20	\$70.33	\$1,406.60
Sample Pick-up Technician	45	\$65.51	\$2,947.95
QC/QA Level I	16	\$84.22	\$1,347.52
QC/QA Level II	180	\$98.86	\$17,794.80
Vehicle Days	20	\$65.00	\$1,300.00
Compressive Strength of Concrete Cylinders	180	\$25.00	\$4,500.00
Aggregate Gradation	5	\$140.00	\$700.00
Sub Total:			\$30,681.27

*PCC Testing was based on 90 site visits per RFP

Soil Testing

Description	Hours/Units	Rate	Cost
Project Manager	4	\$171.10	\$684.40
Documentation Engineer	4	\$70.33	\$281.32
QC/QA Level III	16	\$106.26	\$1,700.16
Standard Proctor (AASHTO T99)	4	\$215.00	\$860.00
Vehicle Days	2	\$65.00	\$130.00
Sub Total:			\$3,655.88

*Soil Testing was based on 4 site visits.

Estimated Cost: \$70,032.95



Material Solutions Laboratory

1040 Bonaventure Drive, Elk Grove Village, Illinois 60007
Office: 847-466-7216 Fax: 847-285-1712

RATE SHEET FOR FIELD TESTING, INSPECTION & LABORATORY SERVICES

2014

Personnel

Project Manager	\$171.10/hour
Documentation Engineer	\$70.33/hour
QC/QA Technician I	\$84.22/hour
QC/QA Technician II	\$98.86/hour
QC/QA Technician III	\$106.26/hour
Sample Pick-Up Technician	\$65.51/hour

* Rates for personnel were calculated using MSL's approved IDOT overhead rate.

**Sample Pick-Up technician will be actual travel time to pick up and deliver sample back to MSL's Lab.

Laboratory/Field Services

Core Density	\$60.00/each
Standard Proctor	\$215.00/each
Compressive Strength of Concrete Cylinders	\$25.00/each
Aggregate Gradations	\$140.00/each
Reflux Extraction	\$230.00/each
Reflux Extraction (HMA w/ RAS)	\$350.00/each
HMA Void Testing	\$400.00/each
Vehicle Charge*	\$65.00/day

*For days 4 hours or less the rate will be \$32.50

**Other Lab Services are available upon request.

Notes:

1. Material Solutions Laboratory (MSL) charges the hourly rate for the actual travel time from its lab located in Elk Grove Village to/from the job site.
2. A minimum of 4 hours on site will be billed to the client. For time on-site greater than 4 hours an 8 hour minimum will apply. All minimums include travel time.
3. Unit Rates are for a normal 8-hour workday with overtime after 8 hours per day and on Saturday. Overtime will be invoiced at 1.5 times the normal hourly rate.
4. The rates quoted above include the charges for the equipment and vehicle.
5. Any night work will be subject to a +10% shift differential.
6. Please give 24 hour notice to schedule a technician (847-466-7216).
7. In the event of cancellation of field work for reasons other than weather related, please give 24 hours notice (847-466-7216).



Material Solutions Laboratory

1040 Bonaventure Drive, Elk Grove Village, Illinois 60007
Office: 847-466-7216 Fax: 847-285-1712

	Name	Title	Level of Training	Phone Number
1	Daniel Tiltges	Project Manager	III	847-404-9253
2	Sam Kukadia	Project Manager	III	773-732-7222
3	Austin Roths	Documentation Eng.	II	586-242-2826
4	James Galligan	QC/QA Level III	III	847-456-0373
5	Hyder Faisal	QC/QA Level II	II	630-439-5657
6	Brian Wilk	QC/QA Level III	III	708-768-2136
7	Sherwin Bollam	QC/QA Level II	II	773-983-0414
8	Dan Davis	QC/QA Level II	II	630-632-5975
9	Mohammed Z. Ali	QC/QA Level III	III	847-951-1513
10	Hasmukh Patel	QC/QA Level II	II	224-425-9996
11	Zach Barrie	QC/QA Level III	II	248-705-5105
12	Mohammed Shakeel	QC/QA Level II	II	773-932-7861
13	Austin Roths	Documentation Eng.	II	586-242-2826
14	Kal J. Patel	QC/QA Level I	I	847-525-1906
15	Kevin Gomila	QC/QA Level II	II	931-510-3272
16	Avesta Loloee	QC/QA Level I	I	517-930-2982
17	Syed Ali	QC/QA Level II	II	224-766-9149
18	Donovan Matera	QC/QA Level II	II	262-577-1044
19	Habeeb Ansari	QC/QA Level I	I	567-328-9092
20	Mohd Hasan	QC/QA Level III	III	773-593-0387
21	Mustafa M. Hasan	QC/QA Level II	II	708-420-3495
22	Greg Balagna	QC/QA Level II	II	815-378-7122
23	Khalid Elefrangi	QC/QA Level I	I	847-312-0518
24	Muhammed Khan	QC/QA Level II	II	630-439-5894
25	Masqood Khan	QC/QA Level II	II	630-456-8327