


Local Agency Lake County Division of Transportation	 <b>Illinois Department of Transportation</b>  <b>Construction Engineering Services Agreement For Federal Participation</b>	Consultant Alfred Benesch & Company
County Lake		Address 205 N. Michigan Avenue
Section 09-00999-07-TI		City Chicago
Project No.		State IL
Job No. N/A		Zip Code 60601
Contact Name/Phone/E-mail Address Mr. Glenn Petko 847-377-7400 gpetko@lakecountyil.gov	Contact Name/Phone/E-mail Address Daniel M. Gross 312-565-0450 dgross@benesch.com	

THIS AGREEMENT is made and entered into this 22 day of March, 2010 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the PROJECT described herein. Federal-aid funds allotted to the LA by the state of Illinois under the general supervision of the Illinois Department of Transportation (STATE) will be used entirely or in part to finance engineering services as described under AGREEMENT PROVISIONS.

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

<b>Regional Engineer</b>	Regional Engineer, Department of Transportation
<b>Resident Engineer</b>	LA Employee directly responsible for construction of the PROJECT
<b>Contractor</b>	Company or Companies to which the construction contract was awarded

#### Project Description

Name ITS Project Route \_\_\_\_\_ Length N/A Structure No. N/A

Termini Rollins Road (Lotus to the western terminus) and IL Rte. 83 (US 45 to Westmoreland Dr.)

Description: Project consists of new traffic signal equipment, a fiber optic communication system interconnecting traffic signals along Rollins Road and IL Rte. 83. Minor curb and gutter removal and replacement with detectable warning pad to accommodate ADA requirements and all other items to complete the work at these intersections along Rollins Road and IL Rte. 83.

#### Agreement Provisions

##### I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the engineering services for the LA, in connection with the PROJECT hereinbefore described and checked below:
  - a. Proportion concrete according to applicable STATE Bureau of Materials and Physical Research (BMPR) Quality Control/Quality Assurance (QC/QA) training documents or contract requirements and obtain samples and perform testing as noted below.
  - b. Proportion hot mix asphalt according to applicable STATE BMPR QC/QA training documents and obtain samples and perform testing as noted below.
  - c. For soils, to obtain samples and perform testing as noted below.
  - d. For aggregates, to obtain samples and perform testing as noted below.

NOTE: For 1a. through 1d. the ENGINEER is to obtain samples for testing according to the STATE BMPR "Project Procedures Guide", or as indicated in the specifications, or as attached herein by the LA; test according to the STATE BMPR "Manual of Test Procedures for Materials", submit STATE BMPR inspection reports; and verify compliance with contract specifications.

  - e. Inspection of all materials when inspection is not provided at the sources by the STATE BMPR, and submit inspection reports to the LA and the STATE in accordance with the STATE BMPR "Project Procedures Guide" and the policies of the STATE.
  - f. For Quality Assurance services, provide personnel who have completed the appropriate STATE BMPR QC/QA trained technician classes.
  - g. Inspect, document and inform the resident engineer of the adequacy of the establishment and maintenance of the traffic control.

11. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LA.
12. To submit all invoices to the LA within one year of the completion of the work called for in this AGREEMENT or any subsequent Amendment or Supplement.
13. To submit BLR 05613, Engineering Payment Report, to the STATE upon completion of the work called for in the AGREEMENT.

## II. THE LA AGREES,

1. To furnish a resident engineer to be in responsible charge of general supervision of the construction.
2. To furnish the necessary plans and specifications.
3. To notify the ENGINEER at least 24 hours in advance of the need for personnel or services.
4. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT, on the basis of the following compensation formulas:

Cost Plus Fixed Fee       CPFF = 14.5%[DL + R(DL) + OH(DL) + IHDC], or  
                                   CPFF = 14.5%[DL + R(DL) + 1.4(DL) + IHDC], or  
                                   CPFF = 14.5%[(2.3 + R)DL + IHDC]

Where:    DL = Direct Labor  
               IHDC = In House Direct Costs  
               OH = Consultant Firm's Actual Overhead Factor  
               R = Complexity Factor

Specific Rate               (Pay per element)

Lump Sum                     \_\_\_\_\_

5. To pay the ENGINEER using one of the following methods as required by 49 CFR part 26 and 605 ILCS 5/5-409:

With Retainage

- a) For the first 50% of completed work, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to 90% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) After 50% of the work is completed, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments covering work performed shall be due and payable to the ENGINEER, such payments to be equal to 95% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- c) Final Payment – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and the STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

Without Retainage

- a) For progressive payments – Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) Final Payment – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

6. The recipient shall not discriminate on the basis on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31U.S.C. 3801 et seq.).

- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting or granting agency within ten (10) days after receiving notice under part (B) of paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is convicted, as required by section S of the Drug Free Workplace Act.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

9. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of DOT-assisted contracts. Failure by the ENGINEER to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination this AGREEMENT or such other remedy as the LA deems appropriate.

**Agreement Summary**

Prime Consultant:	TIN Number	Agreement Amount
Alfred Benesch & Company	36-2407363	\$189,162.36
Sub-Consultants:	TIN Number	Agreement Amount
STATE Testing	36-4312824	\$8,000.00
<b>Sub-Consultant Total:</b>		<b>8000.00</b>
<b>Prime Consultant Total:</b>		<b>190278.31</b>
<b>Total for all Work:</b>		<b>198278.31</b>

Executed by the LA:

\_\_\_\_\_  
(Municipality/Township/County)

ATTEST:

By: \_\_\_\_\_

By: \_\_\_\_\_

Clerk

Title: \_\_\_\_\_

(SEAL)

Executed by the ENGINEER:

ATTEST:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_







**Illinois Department  
of Transportation**

**Cost Estimate of  
Consultant Services  
(CPFF)**

Firm STATE Testing  
 Route ITS Project  
 Section 09-00999-07-TL  
 County Lake  
 Job No. \_\_\_\_\_  
 PTB & Item Rollits & IL Rte 83

Date 03/16/10

Overhead Rate 138.72%

Complexity Factor 0

Item	Manhours (A)	Payroll (B)	Overhead & Fringe Benefits (C)	In-House Direct Costs (D)	Fixed Fee (E)	Outside Direct Costs (F)	Unit Work Direct Cost (G)	Sub Total (B+C+D+E+F+G)	Total (B+C+D+E+F+G)	% of Grand Total
Engineering Services	67	2,377.19	3,297.84	595.04	\$909.13	0.00	821.00	8,000.00	8,000.00	100.00%
TOTALS	67	2,377.19	3,297.84	595.04	909.13	0.00	821.00	8,000.00	8,000.00	100.00%

CPFF = 14.5%(DL + R(DL) + OH(DL) + IHDC)

Units of Work Breakdown  
Rollins & IL 83

Lab Testing	<b><u>BITUMINOUS MATERIALS LABORATORY SERVICES</u></b>		
	COMPLETE IDOT SUPERPAVE MIX DESIGN	\$7,370	EACH \$0
	COMPLETE ISHTA SUPERPAVE MIX DESIGN (W/Bailey Method VMA)	\$8,500	EACH \$0
	COMPLETE SMA MIX DESIGN	\$10,500	EACH \$0
	SUPERPAVE/SMA DESIGN MIX VERIFICATION (ONE-POINT)	\$1,980	EACH \$0
	SUPERPAVE/SMA DESIGN MIX VERIFICATION (W/Bailey Method VMA)(ONE-POINT)	\$2,500	EACH \$0
	TENSILE STRENGTH RATIO (T.S.R.) (ASTM D 4867) MARSHALL MIX DESIGN	\$635	EACH \$0
	TENSILE STRENGTH RATION (TSR) SUPERPAVE MIX DESIGN	\$845	EACH \$0
	BULK SPECIFIC GRAVITY (Gmb, or "d") GYRATORY SPECIMEN (AVG. OF 2)	\$415	EACH \$0
	SUPERPAVE AND SMA - MAXIMUM SPECIFIC GRAVITY(Gmm)	\$165	EACH \$0
	EXTRACTION (REFLUX) WITH WASHED GRAD. (ASTM D 2172,C 136)	\$300	EACH \$0
	EXTRACTION (REFLUX) WITH WASHED GRAD. (ASTM D 2172,C 136)	\$225	EACH \$0
	EXTRACTION (CENTRIFUGE) WITH WASHED GRAD.W/MOISTURE CORR. (ASTM C-566 & D-148)	\$495	EACH \$0
	SUPERPAVE - MAXIMUM SPECIFIC GRAVITY(Gmm)-one test &BULK SPECIFIC GRAVITY (Gmb)-Avg. of 2	\$550	EACH \$0
	STABILITY AND FLOW (AVG. OF 3)(ASTM 1559, D 2726)	\$385	EACH \$0
	PAVEMENT ANALYSIS - SINGLE CORE(4")		\$0
	W/SAW CUTTING (ASTM D 2726)	\$60	EACH \$0
	PAVEMENT ANALYSIS - SINGLE CORE(6")	\$60	EACH \$0
	W/SAW CUTTING (ASTM D 2726)	\$60	EACH \$0
	SUPERPAVE PRODUCTION MIX VERIFICATION* (Includes: Reflux Extraction, Gmm, Gmb)	\$800	EACH \$0
	(Includes: Ignition Extraction, Gmm, Gmb)	\$725	EACH \$0
	NUCLEAR CORRELATION UP TO 4 GAUGES	\$550	EACH \$0
	-ADDITIONAL GAUGES (EACH)	\$55	EACH \$0
	-LINEAR REGRESSION OF CORES (15 CORES/\$25 EACH)	\$715	EACH \$0
	INVESTIGATIVE CORING - (INCLUDES ON-SITE CUTTING, DELIVERY TO		\$0
	LAB, UP TO 4 HOURS)	\$990	EACH \$0
	RENTAL OF GYRATORY COMPACTOR PER DAY	\$350	EACH \$0
	CORE ANALYSIS, 6"-EACH CORE (DENSITY & REFLUX)	\$495	EACH \$0
	ALL BUSTED MIX DESIGNS		EACH
	<b><u>AGGREGATE LABORATORY SERVICES</u></b>		
	DRY GRADATION (ASTM C 136)	\$95	EACH \$0
	WASHED GRADATION (ASTM C 136)	\$135	2 EACH \$270
	SPECIFIC GRAVITY AND ABSORPTION (ASTM C 127, C 128)	\$220	EACH \$0
	MOISTURE CONTENT	\$70	EACH \$0
	MINERAL FILLER GRADATION (ASTM D 546)	\$119	EACH \$0
	PGE TESTING (Washed Gradation)	\$255	EACH \$0
	PGE TESTING (Dry Gradation)	\$205	EACH \$0

**AGGREGATE LABORATORY SERVICES(Cont)**

