


Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation	C O N S U L T A N T	Name Amec Foster Wheeler Environment and Infrastructure, Inc.
Township				Address 8745 W. Higgins Road, Suite 300
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		City Chicago
Section 15-00999-15-BR				State Illinois

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

Section Description

Name Multiple Bike Path Abutment Repairs

Route Multiple Length 0.00 Mi. 0.00 FT (Structure No. Multiple)

Termini Abutments only at multiple locations

Description:

Abutment Repair Plans for five structures: North Shore Bike Path over Metra Railroad, Canadian National Rail Road, and the Skokie River; Robert McClory Bike Path over Russell Road and IL 173.

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 improvements 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, **Lake County Stormwater Management Commission Permit**, Department of Natural Resources-Office 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.
 - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with **one (1) copy of each document in both hardcopy and electronic format**. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
 - h. ☐ Furnish the LA with survey and drafts in **duplicate** of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
 - i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals

- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
 - l. ☒ Services as included and/or defined in the attached Scope of Services.
2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the LA of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA ~~and the DEPARTMENT~~.
 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA ~~or the Department~~.
 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.
 5. That 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. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method 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 percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

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 all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus __ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"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. *See the CECS

The Total Not-to-Exceed Contract Amount shall be \$174,512.13

3. That payments due the ENGINEER for services rendered in accordance with 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 section 1 of the ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on 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 due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~
- 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 improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 15 percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
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 15 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their 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 the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, 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 this 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 the ENGINEER 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 the ENGINEER's 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 the AGREEMENT to be executed in triplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST: County of Lake of the
(Municipality/Township/County)
State of Illinois, acting by and through its
County Board
By Lake County Clerk
(Seal)
By
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:

ATTEST:

By John M. Gentile
Title Executive Assistant

Amec Foster Wheeler Environment and Infrastructure, Inc.
Engineering Firm
8745 W. Higgins Road, Suite 300
Street Address
Chicago, Illinois
City, State

By Gary Baker, P.E.
Title Senior Associate Engineer



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

Various Bike Path Substructure Repair
Lake County Division of Transportation
May 26, 2015

Scope of Work

The CONSULTANT, Amec Foster Wheeler Environment and Infrastructure, Inc. (AmecFW) agrees to perform, at the discretion of the Lake County Division of Transportation, the services described below:

This work shall include the following: Preparation of plans, specifications and a cost estimate for the repair of the substructure elements (abutments) of the following structures to be packaged into a single construction contract:

North Shore Bike Path over Canadian National Rail Road
North Shore Bike Path over Metra Rail Road
North Shore Bike Path over Skokie River
Robert McClory Bike Path over Russell Road
Robert McClory Bike Path over IL 173

The following task list is described in further detail under Part II – Detailed Scope:

- 1.0 Hands on inspection;
- 2.0 Survey;
- 3.0 Permitting;
- 4.0 Structural Repair plan preparation;
- 5.0 Roadway plan preparation;
- 6.0 Administration;
- 7.0 Quality Assurance and Quality Control.

Progress Reports will be submitted on a monthly basis and will include a statement summarizing the work performed during the report period and an outline of the work expected to be performed during the following period.

PART II – DETAILED SCOPE

The general responsibilities of the CONSULTANT to complete the Project are as follows:

- 1.0 Hands on Inspection
The CONSULTANT shall:

- 1.1 Get within arm's reach of all deterioration noted. Man-lift equipment for this work will be required at the North Shore Bike Path over the Canadian National and Metra Rail Roads and the Robert McClory Bike Path over Russell Road. The CONSULTANT shall provide the man-lift equipment. Lake County DOT will provide the lane closure for the inspection at Robert McClory Bike Path over Russell Road.

2.0 Survey

The CONSULTANT shall:

- 2.1 Perform a topographic survey in the vicinity of Robert McClory Bike Path over IL 173. This survey will focus on the existing abutments in order to develop repair details for the guardrail connections at the north abutment and an embankment at the south abutment. The surveyor will also identify and locate all ROW in the vicinity of the bridge in order to determine feasibility of adding an embankment cone at the south abutment.

3.0 Permitting

The CONSULTANT shall:

- 3.1 Collect information in the vicinity of the North Shore Bike Path over the Skokie River. It is anticipated that a Joint Permit Application will be required for the Phase III repair of these abutments due to the necessity of the workers to operate in the River during the repair of the abutments. This Application shall be prepared and submitted during Phase II.
- 3.2 Other permitting tasks shall include:
 - 3.2.1 EcoCat consultation
 - 3.2.2 Historic Preservation application
 - 3.2.3 Sediment and erosion control plan

It is assumed this project will qualify for USACE RP7 "Temporary Construction Activities". The Joint Permit will be submitted to the USACE, IDNR-OWR. Copies of the Joint Permit will also be submitted to Lake County SMC, and the Village of Lake Bluff. No permits or special requirements from the SMC and Village of Lake Bluff are anticipated and therefore are not included in this scope. A wetland determination (and delineation) is not included in this scope. The CONSULTANT shall use approximate method to establish the ordinary high water mark in the field and this information will be transferred onto the 2007 Lake County contour information in order to generate the limits of the riverine Waters of the US. Permit fees/costs are not included in this scope and are assumed to be paid by Lake County DOT.

4.0 Structural Plan preparation

The CONSULTANT shall:

- 4.1 Create detailed plans from the dimensions and measurements taken in the field of each abutment and wingwall. These detailed plans shall include the repairs recommended in the Bridge Inspection Reports performed by AmecFW in March of 2015. A General Plan and Elevation sheet will also be created for each respective location. Special Provisions shall be prepared as required.
- 4.2 Investigate ROW restrictions, IDOT requirements, etc. for a potential embankment cone around the South Abutment at the Robert McClory Bike Path over IL 173.

5.0 Roadway Plan preparation
The CONSULTANT shall:

- 5.1 Create a Title Sheet, Index of Sheets/General Notes, a project Summary of Quantities, Maintenance of Traffic sheets (at the Russell Road and IL 173 locations only), Special Provisions, and a cost estimate. Guardrail connection details at the IL 173 location will also be included.
- 5.2 Investigate grading/contour plans, MOT plans, etc. for the potential embankment cone around the South Abutment at the Robert McClory Bike Path over IL 173. These details will not be included as part of the plan package but submitted to LCDOT separately for construction to be performed by LCDOT in-house workers.

6.0 Administration
The CONSULTANT shall:

- 6.1 Obtain all required Certificates of Insurance and Right-of-Way agreements in order to perform work within the Railroads Right-of-Way. The costs for each of these locations are estimated at \$1,000 application fee, \$700 per day for a flagger, and \$4,000 for Railroad Protective Liability Insurance. The CONSULTANT shall discuss with Lake County DOT if the actual costs differ from the estimate at the time of application.
- 6.2 Perform all miscellaneous administrative tasks including preparing a health and safety plan for the project; preparing all correspondence, coordinating with Lake County on administrative matters, internal team coordination, pickup and return rental man-lift equipment, assistance with plan printing and delivery (prefinal and final submittals); and preparing monthly progress reports to accompany the monthly invoices. The CONSULTANT shall also attend meetings with Lake County DOT after each Prefinal and Final submittal. We will organize and attend a coordination meeting with the CN and Metra railroads. We will also organize and attend a coordination meeting with IDOT.

7.0 Quality Assurance and Quality Control
The CONSULTANT shall:

- 7.1 Prepare a project specific Quality Plan. Perform internal QA/QC reviews in accordance with Quality Plan of all Plans and specifications including technical calculations prior the submittal of the prefinal and final plans.

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

DF-824-039

REV 12/04

FIRM

Amec Foster Wheeler Environment and Infrastructure

DATE

05/26/15

PSB

Multiple Bike Path Abutment Repairs

OVERHEAD RATE

1.6711

PRIME/SUPPLEMENT

PRIME

COMPLEXITY FACTOR

0

FIXED FEE = 14.5%[DL + R(DL) + 1.4(DL) + IHDC]

ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
Inspections	62	2,693.90	4,501.78		937.48	1,000.00			9,133.15	5.23%
Survey	5	243.44	406.81		84.72		15,843.56	15,843.56	16,578.53	9.50%
Permitting	54	2,698.92	4,510.17		939.22				8,148.31	4.67%
Structural Plan Preparation	808	29,639.64	49,530.80		10,314.59				89,485.04	51.28%
Roadway Plan Preparation	218	8,060.26	13,469.50		2,804.97				24,334.73	13.94%
Administration	68	3,244.64	5,422.12		1,129.13	11,400.00			21,195.89	12.15%
QA/QC	42	1,866.94	3,119.84		649.70				5,636.48	3.23%
TOTALS	1257	48,447.74	80,961.02	0.00	16,859.81	12,400.00	15,843.56	15,843.56	174,512.13	100.00%

DBE

Accurate Group, Inc.

\$ 15,843.56 Other subs

Multiple Bike Path Abutment Repairs

05/26/15

Item Number	Work Item	Sheet Count	Sr Principal/ Project Manager	Principal Engineer	Senior Engineer	Project Engineer	Staff Engineer	Senior Technician	Technician	Admin	AMEC Item Total	Accurate		Grand Total
1.0	Inspections													
1.1	Hands-on Inspection			2	30	30					62			
	Subtotal:	0	0	2	30	30	0	0	0	0	62	0	0	62
2.0	Survey													
2.1	Survey			1	4						5	168		
	Subtotal:	0	0	1	4	0	0	0	0	0	5	168	0	173
3.0	Permitting (North Shore Path over Skokie River)													
3.1	Joint Permit Application			34				6			40			
3.2.1	EcoCat Consultation			2							2			
3.2.2	Historic Preservation Application			3				1			4			
3.2.3	Sediment and Erosion Control Plan	1		6				2			8			
	Subtotal:	0	0	45	0	0	0	9	0	0	54	0	0	54
4.0	Structural Plan Preparation													
4.1	Structural Plans	30	2	80	176		176	336			770			
4.2	Embankment Cone	1		2	8		12	16			38			
	Subtotal:	31	2	82	184	0	188	352	0	0	808	0	0	808
5.0	Roadway Plan Preparation													
5.1	Roadway Plans	12	4	8	50		50	68			180			
5.2	Embankment Cone	1		2	8		12	16			38			
	Subtotal:	12	4	10	58	0	62	84	0	0	218	0	0	218
6.0	Administration													
6.1	RR Coordination			8			4			2	14			
6.2	Miscellaneous administrative		12	18	8		8			8	54			
	Subtotal:	0	12	26	8	0	12	0	0	10	68	0	0	68
7.0	QA/QC													
7.1	QAQC		4	10	10		10	8			42			
											0			
											0			
											0			
	Subtotal:	0	4	10	10	0	10	8	0	0	42	0	0	42
	PROJECT SUMMARY													
1.0	Inspections	0	0	2	30	30	0	0	0	0	62	0	0	62
2.0	Survey	0	0	1	4	0	0	0	0	0	5	168	0	173
3.0	Permitting (North Shore Path over Skokie Riv	0	0	45	0	0	0	9	0	0	54	0	0	54
4.0	Structural Plan Preparation	31	2	82	184	0	188	352	0	0	808	0	0	808
5.0	Roadway Plan Preparation	12	4	10	58	0	62	84	0	0	218	0	0	218
6.0	Administration	0	12	26	8	0	12	0	0	10	68	0	0	68
7.0	QA/QC	0	4	10	10	0	10	8	0	0	42	0	0	42
	TOTALS	43	22	176	294	30	272	453	0	10	1257	168	0	1425