

Municipality City of Aurora	L O C A L A G E N C Y	 Illinois Department of Transportation Preliminary/Construction Engineering Services Agreement	C O N S U L T A N T	Name HR Green, Inc.
Township				Address 651 Prairie Pointe Dr.: Suite 201
County Kane				City Yorkville
Section 17-00319-00-PV				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 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:

- 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 Duke Pkwy Extension Route _____ Length _____ miles Structure No. _____

Termini Duke Parkway Extension from 650FT west of IL 59 to IL 59 including approximately 1600 FT along IL 59

Description

Construction of the extension of Duke Parkway in the City of Aurora. Work includes the construction of 650FT of full-depth bituminous concrete pavement along with concrete curb and gutter along Duke Parkway as well as other ancillary items of work. Work along IL 59 will include the construction of turn lanes and a new signalized intersection with Duke Parkway to enhance channelization of movements at the IL59 and Duke Parkway intersection.

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 plans 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.

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, 2, 3, 5 and 6 in accordance with one of the following methods indicated by ~~a check mark~~:

AN AMOUNT AS NOTED IN ATTACHMENT TITLED
" CONSTRUCTION ENGINEERING SCOPE OF WORK "

- 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. 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

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 165.16 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 165.1 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

By _____

CITY COUNCIL

Clerk

By _____

(Seal)

Title:

DIRECTOR OF PROCUREMENT

Executed by the ENGINEER:

HR Green, Inc _____

651 Prairie Pointe Dr.; Suite 201 _____

ATTEST:

Yorkville, Illinois 60560 _____

By Sheldon Hamilton _____

Abham Chaudhry

Title: Senior project Manager

Title: Vice President

Approved

Date
Department of Transportation

Regional Engineer

Construction Engineering Scope of Work

Based on projects of similar size and scope, HR Green, Inc.'s construction engineering proposal for the traffic signal and intersection improvements for the Duke Parkway Extension project utilizes an estimated duration of one-hundred and twelve (112) working days. This constitutes approximately 214 calendar days (7 Months) on site. A working day, as defined by the Illinois Department of Transportation (IDOT), is any calendar day between May 1 and November 30, except legal holidays, in which the contractor is able to work on the designated controlling item.

The man-hours required for construction observation were based upon the assumption that full time monitoring of the project will be required and that the contractor will complete the project within the estimated duration. Additional hours were included for the project start-up and close-out, processing pay estimates, and providing layout verification and as-built drawings. It is anticipated that the project will begin around May 1, 2017 and be complete in November 2017. Any additional work due to an extended schedule dictated by the contractor's performance or unanticipated work due to site conditions, or a significant change in scope of the project, shall warrant a contract addendum.

The following is a breakdown of the various tasks associated with the construction observation which will be completed by HR Green, Inc.:

A. Project Startup

This work includes the need for a Resident Engineer (Civil Engineer III) to review the approved plans and specifications to become familiar with the project, review the contractor's proposed construction schedule and to set-up the project's file system and paperwork. Hours are included for Principal, Project Manager and Resident Engineer to prepare for, and attend the preconstruction meeting. Additionally, hours are included for accounting staff to develop and implement the project within HR Green's accounting software program.

Principal	1 HR/Week x 1 Week x 1 person	Subtotal = 1 Hour
Const. Sr. Proj Mgr	4 HR/Week x 1 Week x 1 Person	Subtotal = 4 Hours
Civil Engineer III	8 HR/Week x 1 Week x 1 person	Subtotal = 8 Hours
Acct. Specialist II	1 HR/week x 1 Week x 1 person	Subtotal = 1 Hour

B. Construction Observation

HR Green will provide full-time Construction Observation Services. HR Green will be on-site to observe and verify that items being constructed and materials being utilized are in general conformance with the approved plans and specifications.

HR Green will complete Inspector's Daily Reports (IDRs) and a daily diary, measure and document contract quantities, complete payment estimates, change orders, and weekly reports. Weekly reports will be submitted to the contractor, IDOT and the City of Aurora. HR Green will verify that all materials incorporated into this project are IDOT approved and evidence of material inspection is in compliance with the Project Procedures Guide and Special Provisions of this contract. HR Green shall keep the City of Aurora informed as to the progress of construction and shall endeavor to guard the City of Aurora against deficiencies in work.

C. If so desired, HR Green can conduct weekly progress meetings with the contractor and the City of Aurora. HR Green will prepare agendas and distribute meeting minutes to all attendees.

HR Green will review the condition of the traffic control twice daily per IDOT Standard Specifications. A Traffic Control Condition Report will be completed after each traffic control review to ensure that the contractor is in compliance with all required traffic control standards. HR Green will also perform bi-weekly nighttime traffic surveillance observations for the duration of the project when traffic control devices are in place. Traffic control reviews will be completed for the construction zone and the entire detour route.

Included is review of contractor submitted shop drawings for general conformance with design concept of the project and general compliance with the information in the contact documents.

Additional hours are included for Construction Technician support as needed during the peak construction periods of July and August.

Civil Engineer III	40 HR/Week x 24 Weeks x 1 Person	Subtotal = 960 Hours
Const. Tech II	40 HR/Week x 8 Weeks x 1 Person	Subtotal = 320 Hours

D. Resident Engineering Administration

Construction Management personnel will provide guidance and consultation to the Resident Engineer as needed. It is anticipated that one site visit per week will be made by the Sr. Project Manager to ensure the project is being administered properly and staff is equipped appropriately to ensure that observation and documentation is being performed in compliance with IDOT Standard Procedures. This will also include the management oversight of the project which will include the on-going review of the project execution, documentation, schedule and budget, contract file management, and general correspondence between HR Green, City of Aurora, IDOT, the contractor, and subcontractors.

Principal	0.5 HR/Week x 28 Weeks x 1 Person	Subtotal = 14 Hours
Const. Sr. Prog. Mgr	3 HR/Week x 28 weeks x 1 person	Subtotal = 84 Hours
Accounting Spl II	2.0 HR/Month x 7 Months x 1 person	Subtotal = 14 Hours

E. Construction Layout Verification and Record Drawings

This work will consist of marking and measuring removal items, verification of contractor layout; verification of locations for signal foundations and equipment, layout of traffic control and signage, and verifying existing alignments and elevations to ensure constructability of the plans and to create accurate as-built drawings.

Additionally, HR Green will create red-line as-built drawings to accurately reflect any changes that might have occurred during construction and submit 11x17 pdf copies to the City of Aurora upon completion of the project.

Proj. Land Surveyor	40 HR/Week x 1 Week x 1 person	Subtotal = 40 Hours
Civil Engineer III	2 HR/Week x 20 Weeks x 1 person	Subtotal = 40 Hours

F. Quality Assurance Material Testing

This work will consist of providing Quality Assurance testing of the contractor's quality control of materials. Rubino Engineering will perform all on-site Concrete and Bituminous Testing per IDOT Quality Assurance criteria. No off-site testing is included in this proposal.

The contractor must provide 48-hour notice to HRG prior to installation or construction of items listed above. Additionally, the contractor must provide 48-hour notice for scheduling of any material testing.

HR Green shall not supervise, direct or have any control over the contractor's work. HR Green shall not have any responsibility for the construction means, methods, techniques, sequences or procedures selected by the contractor. Also, HR Green is not responsible for the contractor's safety precautions or programs in connection with this work. These rights and responsibilities are solely those of the contractor.

HR Green shall not be responsible for any acts or omissions of the contractor, subcontractor or any entity performing any portion of the work, or any agents or employees of any of them. HR Green does not guarantee the performance of the contractor and shall not be responsible for the contractor's failure to perform its work in accordance with the contract drawings and documents.

Construction Staking is not included in this agreement. Plant inspections of epoxy coated rebar and fabricated equipment is not included.

Hourly Rates are based on 2016 HR Green average rates for each classification, an escalation rate will be applied to account for the March 1, 2017 HR Green Salary increase.

