

MAY 17 2010

ORDINANCE NO. 2786

*J. Ronald Clegg*  
City Clerk

**AN ORDINANCE TO EMPLOY OATES ASSOCIATES, INC. OF  
COLLINSVILLE, ILLINOIS TO RENDER PROFESSIONAL  
SERVICES TO THE CITY OF COLUMBIA, ILLINOIS IN  
CONNECTION WITH PRELIMINARY ENGINEERING FOR THE  
QUARRY ROAD & OLD IL 3/GHENT INTERSECTION  
IMPROVEMENTS.**

WHEREAS, the City Council of the City has found and determined and does hereby declare that it is necessary and appropriate that the City employ Oates Associates, Inc. to provide professional services to the City for preliminary engineering services of the Quarry Road & Old IL 3/Ghent Intersection Improvements;

NOW, THEREFORE, BE IT ORDAINED, by the City Council of the City of Columbia, Illinois, as follows:

**Section 1.** The recitals contained above in the preamble of this Ordinance are hereby incorporated herein by reference, the same as if set forth in this Section of this Ordinance verbatim, as findings of the City Council of the City of Columbia, Illinois.

**Section 2.** The City Council of the city does hereby authorize the employment of Oates Associates, Inc. to provide the professional services to the City for preliminary engineering with regard to the City's Quarry Road & Old IL 3/Ghent Intersection Improvements Project. The Mayor is hereby authorized and directed to execute and deliver to Oates Associates, Inc., for and on behalf of the City, the "Preliminary Engineering Services Agreement for Federal Participation" between the City of Columbia, Illinois and Oates Associates, Inc. for a lump sum not to exceed Seventy-Six Thousand Three Hundred Dollars and No Cents (\$76,300.00) in the form attached hereto, which is hereby approved as to form, in as many counterparts as the Mayor shall determine and the City Clerk is hereby authorized and directed to attest the same and to affix thereto the corporate seal of the City.

**Section 3.** This ordinance shall be in full force and effect from and after its passage, as provided by law.

Alderman Ebersohl moved the adoption of the above and foregoing Ordinance; the motion was seconded by Alderman Oberfell, and the roll call vote was as follows:

YEAS: Aldermen Ebersohl, Agne, Niemietz, Row, Hejna, Oberfell, Stumpf and Roessler.

NAYS: None.

ABSENT: None.

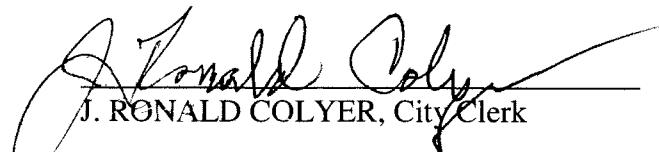
ABSTENTIONS: None.

PASSED by the City Council and APPROVED by the Mayor this 17<sup>th</sup> day of May, 2010.



KEVIN B. HUTCHINSON, Mayor

ATTEST:



J. RONALD COLYER, City Clerk  
(SEAL)

STATE OF ILLINOIS )  
 ) SS  
COUNTY OF MONROE )

**CERTIFICATE OF TRUE COPY**

I, J. Ronald Colyer, hereby certify that I am the duly elected and acting City Clerk of the City of Columbia, Illinois and as such I am the keeper of the books, records, files and corporate seal of said City.

I do further certify that Ordinance No. 2786, entitled:

**“AN ORDINANCE TO EMPLOY OATES ASSOCIATES, INC. OF  
COLLINSVILLE, ILLINOIS TO RENDER PROFESSIONAL  
SERVICES TO THE CITY OF COLUMBIA, ILLINOIS IN  
CONNECTION WITH PRELIMINARY ENGINEERING FOR THE  
QUARRY ROAD & OLD IL 3/GHENT INTERSECTION  
IMPROVEMENTS.”**

to which this certificate is attached, is a true, perfect, complete and correct copy of said ordinance as adopted at a regular meeting of the Columbia, Illinois City Council held on the 17<sup>th</sup> day of May, 2010.

IN WITNESS WHEREOF, I have made and delivered this certificate for the uses and purposes hereinabove set forth this 17<sup>th</sup> day of May, 2010.

  
J. RONALD COLYER, City Clerk

(SEAL)

Local Agency City of Columbia	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Federal Participation</b>	Consultant Oates Associates, Inc.
County Monroe		Address 100 Lanter Court, Suite 1
Section		City Collinsville
Project No.		State IL
Job No.		Zip Code 62234
Contact Name/Phone/E-mail Address Ron Williams (618) 281-7144 / ron@columbiaillinois.com		Contact Name/Phone/E-mail Address Tom Cissell (618) 345-2200 tom.cissell@oatesassociates.com

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 PROJECT. 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.

#### Project Description

Name Quarry Road & Old IL 3 / Ghent Intersection Improvements Route \_\_\_\_\_ Length \_\_\_\_\_ N/A \_\_\_\_\_ Structure No. \_\_\_\_\_

Termini \_\_\_\_\_

Description : Implementation of this project shall improve the geometry and operations at the intersection of Quarry Road and Old IL -3 / Ghent Road by incorporating medians, a northbound right turn lane, and a southbound free-flow right turn lane.

#### Agreement Provisions

##### I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LA for the proposed improvement herein described.
2. To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LA or STATE.
3. To complete the services herein described within 300 calendar days from the date of the Notice to Proceed from the LA, excluding from consideration periods of delay caused by circumstances beyond the control of the ENGINEER.
4. The classifications of the employees used in the work should be consistent with the employee classifications and estimated man-hours shown in EXHIBIT A. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are indicated in Exhibit A to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
5. That the ENGINEER is qualified technically and is entirely conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated herein.
6. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of work by the STATE will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or for clarification of any ambiguities.
7. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will affix the ENGINEER's professional seal when such seal is required by law. Plans for structures to be built as a part of the improvement will be prepared under the supervision of a registered structural engineer and will affix structural engineer seal when such seal is required by law. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the STATE.
8. That the ENGINEER will comply with applicable federal statutes, state of Illinois statutes, and local laws or ordinances of the LA.

9. The undersigned certifies neither the ENGINEER nor I have:

- a. employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for me or the above ENGINEER) to solicit or secure this AGREEMENT,
- b. agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
- c. paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for me or the above ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
- d. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
- e. have not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property,
- f. are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (e) and
- g. have not within a three-year period preceding this AGREEMENT had one or more public transactions (Federal, State or local) terminated for cause or default.

10. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LA.

11. 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.

12. To submit BLR 05613, Engineering Payment Report, to the STATE upon completion of the project (Exhibit B).

13. Scope of Services to be provided by the ENGINEER:

- Make such detailed surveys as are necessary for the planning and design of the PROJECT.
- Make stream and flood plain hydraulic surveys and gather both existing bridge upstream and downstream high water data and flood flow histories.
- Prepare applications for U.S. Army Corps of Engineers Permit, Illinois Department of Natural Resources Office of Water Resources Permit and Illinois Environmental Protection Agency Section 404 Water Quality Certification.
- Design and/or approve cofferdams and superstructure shop drawings.
- Prepare Bridge Condition Report and Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types and high water effects on roadway overflows and bridge approaches).
- Prepare the necessary environmental and planning documents including the Project Development Report, ~~Environmental Class of Action Determination or Environmental Assessment, State Clearinghouse, Substate Clearinghouse~~ and all necessary environmental clearances.
- Make such soil surveys or subsurface investigations including borings and soil profiles as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations to be made in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE.
- Analyze and evaluate the soil surveys and structure borings to determine the roadway structural design and bridge foundation.
- Prepare preliminary roadway and drainage structure plans and meet with representatives of the LA and STATE at the site of the improvement for review of plans prior to the establishment of final vertical and horizontal alignment, location and size of drainage structures, and compliance with applicable design requirements and policies.
- 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.
- Complete the general and detailed plans, special provisions and estimate of cost. Contract plans shall be prepared in accordance with the guidelines contained in the Bureau of Local Roads and Streets manual. The special provisions and detailed estimate of cost shall be furnished in quadruplicate.
- Furnish the LA with survey and drafts in quadruplicate 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.

## II. THE LA AGREES,

1. To furnish the ENGINEER all presently available survey data and information
2. 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 = DL + DL(OH) + 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]  
 CPFF = DL + OH + (.37 + R) DL

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  \_\_\_\_\_

3. 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.

4. The recipient shall not discriminate 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 (31 U.S.C. 3801 et seq.).

## III. IT IS MUTUALLY AGREED,

1. That no work shall be commenced by the ENGINEER prior to issuance by the LA of a written Notice to Proceed.
2. That tracings, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LA and that basic survey notes, sketches, charts and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request, to the LA or to the STATE, without restriction or limitation as to their use.

3. That all reports, plans, estimates and special provisions furnished by the ENGINEER shall be in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE, it being understood that all such furnished documents shall be approved by the LA and the STATE before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.
4. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall not be construed to relieve the ENGINEER of any responsibility for the fulfillment of this agreement.
5. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General and the STATE; and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the STATE for the recovery of any funds paid by the STATE under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
6. The payment by the LA in accordance with numbered paragraph 3 of Section II will be considered payment in full for all services rendered in accordance with this AGREEMENT whether or not they be actually enumerated in this AGREEMENT.
7. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LA, the STATE, and their officers, agents and employees from all suits, claims, actions or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
8. 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 drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such material becomes the property of the LA. The LA will be responsible for reimbursement of all eligible expenses to date of the written notice of termination.
9. This certification is required by the Drug Free Workplace Act (30ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the State unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract or grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the State for at least one (1) year but no more than five (5) years.

For the purpose of this certification, "grantee" or "contractor" means a corporation, partnership or other entity with twenty-five (25) or more employees at the time of issuing the grant, or a department, division or other unit thereof, directly responsible for the specific performance under a contract or grant of \$5,000 or more from the State, as defined in the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- a. Publishing a statement:
  - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
  - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
  - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
    - (a) abide by the terms of the statement; and
    - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- b. Establishing a drug free awareness program to inform employees about:
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's or contractor's policy of maintaining a drug free workplace;
  - (3) Any available drug counseling, rehabilitation and employee assistance program; and
  - (4) The penalties that may be imposed upon an employee for drug violations.
- 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,
- 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.

10. 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 of this AGREEMENT or such other remedy as the LA deems appropriate.

## Agreement Summary

Executed by the LA:

## City of Columbia

(Municipality/Township/County)

ATTEST:

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

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

(SEAL)

Executed by the ENGINEER:

ATTEST:

84

Joseph G. Hagerty  
Title: Vice President

Qates Associates, Inc.

844

By: David M. Oates



## **Exhibit B**

## Illinois Department of Transportation

## Engineering Payment Report

### **Prime Consultant**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone \_\_\_\_\_  
TIN Number \_\_\_\_\_

## Project Information

Local Agency \_\_\_\_\_  
Section Number \_\_\_\_\_  
Project Number \_\_\_\_\_  
Job Number \_\_\_\_\_

This form is to verify the amount paid to the Sub-consultant on the above captioned contract. Under penalty of law for perjury or falsification, the undersigned certifies that work was executed by the Sub-consultant for the amount listed below.

**Signature and title of Prime Consultant**

Date \_\_\_\_\_

Note: The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under state and federal law. Disclosure of this information is REQUIRED and shall be deemed as concurring with the payment amount specified above.

## EXHIBIT D

**ESTIMATE OF PERSON HOURS**

**FIRM:** OATES ASSOCIATES, INC.  
**ROUTE:** Quarry Road & Old IL-37 Ghent  
**PROJECT:** Intersection Improvements (Design)  
**SECTION:**  
**CITY:** Columbia, IL  
**JOB NO.:** 10006

Date: 01/26/10

TASK	PRIN. ENGR.	SR. ENGR. II	SR. ENGR. I	ENGR. III	JR. ENGR.	TECH. III	TECH. II	TECH. I	TOTAL
<b>SUMMARY OF PERSONHOURS</b>									
1.0 FIELD SURVEYS		9			6	34			28
2.0 INTERSECTION DESIGN STUDIES	4				24	114		14	156
3.0 PROJECT DEVELOPMENT REPORT	5				29	110			144
4.0 HYDRAULIC DATA & REPORT									
5.0 DRAINAGE	2				10	40			52
6.0 UTILITY AND RAILROAD AGREEMENTS	1				6	16			23
7.0 SOILS ANALYSIS AND REPORT									
8.0 STRUCTURE RPTS/ TS & L DRAWINGS									
9.0 STRUCTURE PLANS									
10.0 PRELIMINARY ROAD DESIGN									
11.0 FINAL PLANS/ DOCUMENTS	6				43	222	22		293
12.0 RIGHT OF WAY			4			12			16
13.0 CONSTRUCTION PHASE SERVICES									
14.0 ADMINISTRATION/ MANAGEMENT									
15.0 QA/QC									
	<b>TOTAL</b>	35	13		118	548	22	42	28
									806
									<u>806</u>

## ESTIMATE OF PERSON HOURS

FIRM: OATES ASSOCIATES, INC.  
 ROUTE: Quarry Road & Old IL-3 Ghent  
 PROJECT: Intersection Improvements (Design)  
 SECTION:  
 CITY: Columbia, IL  
 JOB NO.: 10006

DATE: 01/28/10

TASK	PRIN. ENGR.	SR. ENGR.	ENGR. II	ENGR. III	JR. ENGR.	TECH. III	TECH. II	TECH. I	TECH. INTERN	TOTAL	SCOPE OF WORK	
											Approximately 1,000' of roadway. Full topo Old IL-3 and Ghent Road intersection. Partial topo IL-3 northbound ramps.	
<b>1.0 FIELD SURVEYS</b>												
1.1 establish horizontal control	0	0	0	0	34	0	28	28	0	0	105	Road intersection. Partial topo IL-3 northbound ramps.
1.1.1 research control location, coordinates, closure route	0	4	0	0	6	0	4	4	0	0	18	1/2-day for horizontal control
1.1.2 set control point monuments in field	2			2							4	
1.1.3 set control point coordinates / GPS												
1.1.4 traverse between control points in field							4	4			8	
1.1.5 office calculations/ closure & coordinates	2										0	
1.2 establish vertical control	0	2	0	0	4	0	4	4	0	0	14	1/2-day for vertical control
1.2.1 research control location, elevations, closure route											0	included in 1.1.1
1.2.2 set benchmarks monuments in field											0	included in 1.2.4
1.2.3 set benchmark elevations/ GPS											0	included in 1.1.3
1.2.4 elevation loop between benchmarks in field											8	
1.2.5 office calculations/ closure & elevations	2			4			4	4			8	
1.3 establish existing topography	0	1	2	8	0	20	20	20	0	0	51	
1.3.1 locate existing utilities				4							4	Call in ILL locate and stake limits in field
1.3.2 top/profile/cross section	1	2	4			20	20	20			47	Along Quarry, approximate 20 sections at 20 shots each (400 shots)
1.3.3 surveys for hydraulic/drainage studies	0	2	4								0	Estimate 200 shots in each intersection (800 points).
1.4 process survey data for CADD	0	2	4	16	0	0	0	0	0	0	0	N/A
1.4.1 draw existing topo	1	2	8								22	
1.4.2 create & process TIN	1	1	4								11	Draw topo in the office (8-hrs).
1.4.3 field review and edit	1	1	4								6	Create TIN in office (4-hrs).
1.4.4 base sheet plot	1	4									5	Field check topo and TIN and revise (4-hrs)
1.5 establish proposed improvement location	0	0	0	0	0	0	0	0	0	0	0	Included in 1.4.1-3
1.5.1 set proposed centerline control points & ties											0	No time included for proposed alignments
1.5.2 staking for soil surveys											0	Not included.
1.5.3 stake centerline for field check											0	Pick up soil sample locations with topo (1.3.2)
											0	Not included.

**EXHIBIT D**  
**ESTIMATE OF PERSON HOURS**

**FIRM:** OATES ASSOCIATES, INC.  
**ROUTE:** Quarry Road & Old IL-3 Ghent  
**PROJECT:** Intersection Improvements (Design)  
**SECTION:**  
**CITY:** Columbia, IL  
**JOB NO.:** 10096

**DATE:** 01/26/10

TASK	PRIN. ENGR.	SR. ENGR.	JR. ENGR.	TECH. III	TECH. II	TECH. I	TECH. INTERN	TOTAL	SCOPE OF WORK
<b>2.0 INTERSECTION DESIGN STUDIES</b>									
2.1 data collection	4	0	24	114	0	14	0	0	156
2.1.1 establish design criteria/ road classifications	1	0	7	36	0	0	0	0	44
2.1.2 traffic counts	1		2	8					Review CMAQ application and IDOT BDE/ BLR Manuals to create Design Criteria Spreadsheet.
2.1.3 signal warrants (tabulate and summarize)	2		16						Preparation, 8 hr count, and summary spreadsheet.
2.1.4 schematic intersection layout	1	4							5 Show that signal warrants are not met.
2.1.5 coordination with IDOT (growth rate, ADT's, layout)		1	4						Review CMAQ application vs. Design Criteria to confirm the conceptual plan will work.
2.1.6 traffic study (tracted traffic, traffic patterns)		1	4						5 Project Traffic to 2011, 2021, and 2031.
2.2 pedestrian signal warrants	0	0	0	0	0	0	0	0	0
2.3 intersection analysis	2	0	3	40	0	6	0	0	51
2.3.1 capacity analysis (HCS) - AM & PM - Design Year	1	1	16		3				214 hrs ea time period (AM/PM) for 2011 & 2031 traffic.
2.3.2 storage lengths - AM & PM - Design Year		1	8		1				102 hrs ea time period (AM/PM) for 2011 & 2031 traffic.
2.3.3 intersection geometry	1	1	16		2				20 Assume two days for horizontal geometry at Old IL-3 and Ghent Road.
2.4 IDS submittal	1	0	14	38	0	8	0	0	61
2.4.1 location map & site block			2						2
2.4.2 elements controlling design & general notes		1	4						5 List general notes and variance requests
2.4.3 traffic data and analysis charts (const. & design yrs)		2		2	1				3 Complete tables on IDS for stop controlled intersection.
2.4.4 capacity analysis, diagrams		2		1					0 N/A. Stop controlled intersection.
2.4.5 phasing diagram									15
2.4.6 intersection geometry and details		1	12		2				10 QA in task 15.0
2.4.7 plot, print, & submit		2	8						6 Assume 2 migs: 1 with IDOT, 1 with City
2.4.8 review meetings with City and IDOT		6							17.8 Address IDOT's review comments, 4 submit
2.4.9 final submittal and sign-offs	1	4	8		4				

## ESTIMATE OF PERSON HOURS

FIRM: OATES ASSOCIATES, INC.

ROUTE: Quarry Road &amp; Old IL-31 Ghant

PROJECT: Intersection Improvements (Design)

SECTION:

CITY: Columbia, IL

JOB NO.: 10006

DATE: 01/28/10

TASK	PRIN. ENGR.	SR. ENGR.	ENGR. II	ENGR. III	JR. ENGR.	TECH. II	TECH. I	TECH. INTERN	TOTAL	SCOPE OF WORK
3.0 PROJECT DEVELOPMENT REPORT	6	0	28	110	0	0	0	0	0	Acco. According to ESR 11F-131(B), execution of a turn <del>area</del> on ex. ROW 16 144 CE 1 that requires a PDR.
3.1 forms/submittals	1	0	4	16	0	0	0	0	21	
3.1.1 TIP sheet										
3.1.2 project notification & review	1								0	
3.1.3 environmental class of action determination (ECAD)					1	4			6	Develop Fact Sheet for meetings
3.1.4 environmental survey request (project studies)					2	8			0	
3.1.5 environmental survey request (borrow/lease areas)					1	4			5	Historical record research/does not include PESA. State will perform PESA by checking the "Special waiver" box on the ESR form.
3.1.6 bridges and structures NRHP status request					0	0			0	
3.2 meetings	0	0	4	6	0	0	0	0	10	0/n/a
3.2.1 bi-monthly coordination meetings				4	6				10	assume 1 mtg/minutes/initial coordination form
3.2.2 informational meeting									0	Not anticipated. Individual property owners should not be affected.
3.2.3 public hearing									0	0/n/a
3.3 report/tables	0	0	0	0	6	0	0	0	6	
3.3.1 cover sheet					2				2	
3.3.2 table of contents					2				2	
3.3.3 index of exhibits					2				2	
3.4 report/ analysis and text by section	0	0	8	24	0	0	0	0	32	10 collision diagrams
3.4.1 purpose of project					1	3			4	0 should not be required
3.4.2 location & existing conditions					1	2			3	0/n/a
3.4.3 proposed improvements/ criteria					1	2			3	0/n/a
3.4.4 accident analysis					2	8			10	3 summarize ESR results
3.4.5 right-of-way									0	0/n/a
3.4.6 prime farmland									1	1 TIP statement
3.4.7 floodplain encroachment									0	0/n/a
3.4.8 "404" permit									5	3 summarize ESR results
3.4.9 environmental survey					1	2			3	0/n/a
3.4.10 section 4(f) lands									0	0 should not be required.
3.4.11 air quality						1			1	3 summarize coordination meetings
3.4.12 noise										
3.4.13 maintenance of traffic						1	4		5	
3.4.14 public involvement										
3.4.15 coordination						1	2		3	

**EXHIBIT D** **ESTIMATE OF PERSON HOURS**

**FIRM:** OATES ASSOCIATES, INC.

Quarry Road & Old IL-3/ GI  
Intersection Improvements

SECTION: CITY:  Columbia, IL

DATE: 01/26/10

TASK		PRIN ENGR.	SR. ENGR. II	ENGR. III	JR. ENGR.	TECH. III	TECH. II	TECH. I	TECH. INTERN	TECH. TOTAL	SCOPE OF WORK
3.5 report/exhibits		2	0	7	46	0	0	0	0	0	55
3.5.1 location map					2						2
3.5.2 vicinity map					2						2
3.5.3 existing & proposed typical sections		1		3	12						16.4 hrs/ each for Quarry Road, Old IL-3, and Green Typical Sections
3.5.4 aerial photographs					2						2
3.5.5 ground level photographs					2						
3.5.6 proposed alignment											
3.5.7 intersection design study									0 hrs - shown on task 3.5.7		
3.5.8 structure type, size & location plans (TS & L)											1
3.5.9 project cost estimate		1			2		8				0
3.5.10 encroachments											11
3.5.11 accident data, summary and spot maps				2		1					1
3.5.12 biological resources sign-off					2		8				10 request, analyze, and develop spot maps
3.5.13 cultural resources sign-off							1				1
3.5.14 IDNR sign-off							1				1
3.5.15 SIMPAC/IL State Clearinghouse/EWGSCC sign-off							1				0 Not required by IDOT any longer
3.5.18 public notices & news articles							1				1
3.5.19 public informational meeting notice letters									0 Not anticipated. Individual property owners should not be affected		
3.5.20 public informational meeting attendance sheet									0 Not anticipated. Individual property owners should not be affected.		
3.5.21 sign-off on public informational meeting									0 Not anticipated. Individual property owners should not be affected.		
3.5.22 coordination meeting minutes & memoranda					4				4 Assume one coordination meeting with minutes		
3.6 correspondence		0	0	0	0	0	0	0			
3.7 submittals		2	0	6	12	0	0	0	0	0	0
3.7.1 print and submitt draft for IDOT / FHWA review									20		
3.7.2 respond to review comments		1			4				0 QC included in tasks above		
3.7.3 final print and submit		1			2		4				13
4.0 HYDRAULIC DATA & REPORT		0	0	0	0	0	0	0			7
5.0 DRAINAGE											
5.1 storm sewer design		2	0	10	40	0	0	0	0	0	62
5.1.1 storm sewer schematic layout		2	0	7	28	0	0	0	0	0	37
5.1.2 drainage area computations		1		2		8					5
5.1.3 inlet computations / type, size and layout				1		4					5
5.1.4 storm sewer computations / type and size				1		2					11 field check to delineate drainage patterns.
5.1.5 final storm sewer layout				1		4					5 verify inlet spacing.
5.2 culvert design		0	0	0	0	0	0	0			11 size storm sewer extension pipes.
5.3 ditch design		0	0	3	12	0	0	0			5 calculate inverts and EOP grades.
5.3.1 schematic ditch layout				1		4					5 No culverts will be affected by this project.
5.3.2 drainage area computations											0
5.3.3 discharge computations											0
5.3.4 compute ditch capacities											0
5.3.5 propose ditch profile and layout											10 grade ditches to drain along Old IL-3 and Green Road.
5.3.6 ditch lining (velocity studies)											0
6.0 UTILITY AND RAILROAD AGREEMENTS											
6.1 Utilities		1	0	6	16	0	0	0	0	0	23
6.1.1 JULIE request for survey											0 Included in 1.3.1
6.1.2 coordination prints to utilities		1		2		8					11 Assume 2 submittals
6.1.3 coordination meetings with utilities				4		4					8 one meeting with HTC and AERIESTED into 2010-10-31 and 2011-01-25

**EXHIBIT D**  
**ESTIMATE OF PERSON HOURS**

FIRM: OATES ASSOCIATES, INC.  
 ROUTE: Quarry Road & Old IL-31 Ghent  
 PROJECT: Intersection Improvements (Design)  
 SECTION:  
 CITY: Columbia, IL  
 JOB NO.: 10006

DATE: 01/28/10

TASK	PRIN. ENGR.	SR. ENGR.	J.R. ENGR. III	TECH. ENGR. II	TECH. I	TECH. II	TECH. III	TECH. I	TECH. II	TECH. III	INTERN	TOTAL	SCOPE OF WORK		
6.1.4 review utility relocation/ adjustment plans (by utility)															review status of utility forms
6.1.5 coordinate relocation plans (by OA) [see 11.8]															0
6.1.6 utility agreements															0 N/A
6.2 Railroads															0 N/A
7.0 SOILS ANALYSIS AND REPORT															0 N/A
8.0 STRUCTURE RPTS/TS & L DRAWINGS															0 N/A
9.0 STRUCTURE PLANS															0 N/A
10.0 PRELIMINARY ROAD DESIGN															0 N/A
11.0 FINAL PLANS/ DOCUMENTS															0 Completed in Task 2.0
11.1 cover sheet	6	0	43	222	22	0	0	0	0	0	0	0	0	0	283 State Letting
11.1.1 location map/project limits	0	0	4	13	0	0	0	0	0	0	0	0	0	0	17
11.1.2 index of sheets															1
11.1.3 standard drawings index															3
11.1.4 general notes															3
11.2 quantities															10
11.2.1 Pay items & code numbers	1	0	4	44	10	0	0	0	0	0	0	0	0	0	59
11.2.2 pavement schedule & quantities															9
11.2.3 side road schedule & quantities															5
11.2.4 storm sewer schedule & quantities															5
11.2.5 pavement markings schedule & quantities															4
11.2.6 removals schedule & quantities															4
11.2.7 earthwork schedule & quantities															5
11.2.8 other schedules & quantities															5
11.2.9 summary of quantity schedule															10
11.3 typical sections															12
11.3.1 existing typical sections	0	0	5	20	2	0	0	0	0	0	0	0	0	0	27
11.3.2 proposed typical sections															10
11.3.3 structural pavement design															4 sections at 2 hrs/ ea
11.4 construction detail sheets															10 4 sections at 2 hrs/ ea
11.4.1 side streets & entrances	0	0	4	20	2	0	0	0	0	0	0	0	0	0	7
11.4.2 pavement details															26
11.4.3 special ditches															0
11.4.4 drainage structures															0
11.4.5 retaining walls															0
11.4.6 guardrail/ barriers															0
11.4.7 survey line points															0
11.5 intersection/ interchange sheets															0
11.5.1 intersection/ interchange geometrics	2	0	2	24	4	0	0	0	0	0	0	0	0	0	32
11.5.2 intersection/ interchange elevations															11
11.5.3 pavement joint layouts	2		1	8	2										21
11.5.4 ramp profiles/ superelevation			1	16	2										0
11.5.5 ramp terminal details															0
11.5.6 intersection/ interchange cross-section layout															0

**EXHIBIT D**  
**ESTIMATE OF PERSON HOURS**

**FIRM:** GATES ASSOCIATES, INC.

**ROUTE:** Quarry Road & Old IL-3/ Ghent

**PROJECT:** Intersection Improvements (Design)

**SECTION:** Columbian IL

**CITY:**

**JOB NO.:** 10006

**DATE:** 01/26/10

TASK	PRIN. ENGR.	SR. ENGR.	ENGR. II	ENGR. III	J.R. ENGR.	TECH. III	TECH. II	TECH. I	INTERN.	TOTAL	SCOPE OF WORK	
											use highway standards	use highway standards
11.6 maintenance of traffic											0	0
11.6.1 develop construction staging	0	0	2	4	0	0	0	0	0	0	0	0
11.6.2 staging layout and notes											0	n/a
11.6.3 staging details	1	0	2	16	2	0	0	0	0	0	0	n/a
11.6.4 detour plans											0	n/a
11.6.5 traffic control plans				2	4							Plan not included, but time included to review highway standards and include general notes.
11.7 traffic signal plans	0	0	0	0	0	0	0	0	0	0	0	0
11.8 specialty plan sheets	1	0	2	16	2	0	0	0	0	0	0	Not anticipated or included
11.8.1 pavement markings											21	
11.8.2 signing plans	1		1	8	1						10	
11.8.3 lighting plans			1	1	8	1					11	Include pavement marking and sign plan on one sheet.
11.8.4 utility relocation plans											0	Not anticipated or included
11.8.5 landscape plans											0	Not anticipated or included
11.9 road plan/profile sheets	0	0	4	18	0	0	0	0	0	0	22	Not anticipated or included
11.9.1 plan- alignment/ stationing/ curve data											2	
11.9.2 pavement/ shoulders/ medians											0	
11.9.3 intersections/ interchanges											0	
11.9.4 entrances/ access roads											3	set-up sheets for details
11.9.5 guardrail/ barriers											0	No entrances are affected by this project.
11.9.6 storm sewers/ culverts/ ditches											0	n/a
11.9.7 construction limits											5	label storm sewer cutouts
11.9.8 right-of-way/ owners											2	label
11.9.9 benchmarks/ control points											2	label
11.9.10 profile- grades/ elevations/ curve data											1	label
11.9.11 cross-references											5	insert profile and label
11.10 cross sections	0	0	4	22	2	0	0	0	0	0	2	Assume section every 75' along Quarry Road (7.75 sections on 4 sheets)
11.10.1 proposed templates											0	
11.10.2 proposed ditches/ culverts/ storm sewer											0	
11.10.3 proposed ROW limits	1	8	1								10	assume 2 hrs per sheet
11.10.4 earthwork end areas	1	2									3	assume 0.5 hr per sheet
11.10.5 matchlines/ cross-references	1	8	1								10	assume 2 hrs per sheet
11.11 structure plans	1	4									5	
11.12 contract documents	0	0	0	0	0	0	0	0	0	0	0	Not anticipated or included
11.12.1 check sheets	2	0	7	28	0	0	0	0	0	0	35	
11.12.2 supplemental specifications											2	
11.12.3 inform special provisions (BDE and LRS)											6	
11.12.4 special provisions	2		4	12							18	
11.12.5 estimate of lime			1	4							5	
11.12.6 unit cost											0	Not included
11.12.7 estimate of cost											0	
11.13 bidding documents	0	0	0	0	0	0	0	0	0	0	0	by IDOT
11.14 final S&F submittal	0	0	5	15	0	0	0	0	0	0	20	QA in task 15.3.9
11.14.1 plot and assemble final plans			1	4							5	QC included in tasks above
11.14.2 copy and review final CAD files											0	
11.14.3 copy and assemble computations											1	
11.14.4 copy and assemble contract documents											2	
11.14.5 final submittal and close-out	4	8									12	Addreses IDOT's final comments

## ESTIMATE OF PERSON HOURS

FIRM: OATES ASSOCIATES, INC.  
 ROUTE: Quarry Road & Old IL-31 Ghent  
 PROJECT: Intersection Improvements (Design)  
 SECTION:  
 CITY: Columbia, IL  
 JOB NO.: 10006

DATE: 01/26/10

TASK	PRIN. ENGR.	SR. ENGR.	ENGR. II	ENGR. III	JR. ENGR.	TECH. III	TECH. II	TECH. I	TECH. INTERN	TOTAL	SCOPE OF WORK	
											16	16
12.0 RIGHT OF WAY											No new ROW assumed. Establish existing ROW only. Tie-in	
12.1 Right of way survey	0	4	0	0	0	0	0	0	0	0	No time included.	16
12.1.1 review this report/ ownership reports	0	4	0	0	0	0	0	0	0	0	0	6
12.1.2 research record information	2		4								Request road records from IDOT.	
12.1.3 review locations in field, set survey limits											0	0
12.1.4 locate and tie existing monumentation											0	0
12.1.5 review monumentation against records											0	0
12.1.6 supplemental field monumentation											0	0
12.1.7 establish property lines/ ROW	2		8								10	
12.2 plots, plans, descriptions for ROW acquisition	0	0	0	0	0	0	0	0	0	0	0	0
12.3 submittals	0	0	0	0	0	0	0	0	0	0	0	0
12.4 stake proposed ROW											0	0
13.0 CONSTRUCTION PHASE SERVICES	0	0	0	0	0	0	0	0	0	0	0	0
14.0 ADMINISTRATION/ MANAGEMENT	0	0	0	0	0	0	0	0	0	0	0	0
15.0 QA/QC	17	0	0	0	0	0	0	0	0	0	17	
15.1 QA/QC Plan											0	0
15.2 Submittal Reviews	3	0	0	0	0	0	0	0	0	0	3	
15.2.1 Geotechnical Report											0	0
15.2.2 Drainage Report											0	
15.2.3 Structure Reports/ TS&L Drawings											0	
15.2.4 Preliminary Structure Plans											0	
15.2.5 Preliminary Road Plans											0	
15.2.6 Pre-Final Plans	1										1	
15.2.7 Final Plans	1										1	
15.2.8 Final Documents	1										1	
15.3 Quality Reviews	14	0	0	0	0	0	0	0	0	0	14	
15.3.1 Field Surveys											0	0
15.3.2 Geotechnical Investigations and Recommendations											0	0
15.3.3 Permits and Agreements											0	
15.3.4 Intersection/ Traffic Signal Design	2										2	
15.3.5 Drainage Design and Report											0	
15.3.6 Structure Type and Layout											0	
15.3.7 Preliminary Road Design	4										4	
15.3.8 Preliminary Structure Design											0	
15.3.9 Pre-Final Road Design	4										4	
15.3.10 Final Road Design	2										2	
15.3.11 Final Computations/ Quantities	2										2	
15.3.12 Construction Phase Services											0	



PAYROLL ESCALATION TABLE  
FIXED RAISES  
NEW FORMULA

FIRM NAME OATES ASSOCIATES, INC.  
PRIME/SUPPLEMENT \_\_\_\_\_

DATE 01/26/10  
PTB NO. \_\_\_\_\_

CONTRACT TERM	<u>8</u>	MONTHS
START DATE	<u>5/1/2010</u>	
NEXT RAISE DATE	<u>7/1/2010</u>	
COMPLETION DATE	<u>12/30/10</u>	

OVERHEAD RATE  
COMPLEXITY FACTOR  
% OF RAISE

153.99%  
0.000  
3.00%

0.00  
0.035  
0.07

ESCALATION PER YEAR

5/1/2010 - 7/1/2010 7/1/2010 - 12/30/2010

2 \_\_\_\_\_ 6 \_\_\_\_\_  
8 \_\_\_\_\_

75.00%

25.00%  
102.2500%

The total escalation for this project would be:

2.25%



## Illinois Department of Transportation

Firm OATES ASSOCIATES, INC.  
Route Quarry Road & Old IL-3/ Ghent Road  
Section Intersection Improvements (Design)  
City Columbia, IL  
Job No. 10006

**COST ESTIMATE OF  
CONSULTANT  
SERVICES**

<b>(Cost Plus Fixed Fee)</b>	<hr/>
01/26/10	<hr/>
153.99%	<hr/>
0.000	

## PROJECT SCHEDULE

Firm	OATES ASSOCIATES, INC.
Route	Quarry Road & Old IL-31/Ghent Road
Project:	Intersection Improvements
Section:	
City	Columbia, IL
Job No.	10006

TASK	(mos)	2010						2011					
		Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
FIELD SURVEYS	(1)												
INTERSECTION DESIGN STUDIES	(1)												
PROJECT DEVELOPMENT REPORT	(1)												
DRAINAGE	(0)												
UTILITY AND RAILROAD AGREEMENTS	(0)												
FINAL PLANS/ DOCUMENTS	(2)												
RIGHT OF WAY	(0)												
		Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
		2010	0	0	0	0	0	0	0	0	0	2011	0
													0
													0
													0
													0
													0

## ANTICIPATED AUTHORIZATION:

DRAFT PROJECT DEVELOPMENT REPORT SUBMITTAL:

PRE-FINAL PLAN SUBMITTAL;

FINAL PLAN SUBMITTAL:

PROJECTED LETTING:

May 2010

August 2010

November 2010

January 2011

April 2011