

Municipality McHenry County	<b>L O C A L  A G E N C Y</b>	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds</b>  <b>SUPPLEMENT #1</b>	<b>C O N S U L T A N T</b>	Name Strand Associates, Inc.
Township Marengo				Address 1170 South Houbolt Road
County McHenry				City Joliet
Section 08-00357-00-BR				State IL

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. 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 Noe Road Realignment Supplemental Services

Route TR 32 Length 0.405 Mi. 2,140 feet FT (Structure No. 056-3048 )

Termini Carmak Road to 2,140 feet north at Existing Noe Road

Description:  
Phase II engineering services for the superelevation rate adjustment.

### 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, 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 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 easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required

Note: Four copies to be submitted to the Regional Engineer

- 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.
- (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 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 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) 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 him and will show his professional seal where such is required by law.

**The LA Agrees, (REFER TO EXHIBIT A)**

1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:
- a.  A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
  - b.  A sum of money equal to the percent 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 & 1k of the ENGINEER AGREES at 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 his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or 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.

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 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 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 paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus \_\_\_\_\_ percent incurred up to the time he is notified in writing of such abandonment -"actual cost" being defined as 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 \_\_\_\_\_ 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 his 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 his 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 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 the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

County of McHenry \_\_\_\_\_ of the  
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By \_\_\_\_\_

\_\_\_\_\_

Clerk

By \_\_\_\_\_

(Seal)

Title \_\_\_\_\_

Executed by the ENGINEER:

Strand Associates, Inc. \_\_\_\_\_

1170 South Houbolt Road \_\_\_\_\_

ATTEST:

Joliet, IL 60431 \_\_\_\_\_

By \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

<b>Approved</b>
_____
Date
Department of Transportation
_____
Regional Engineer

CHANGES

NOE ROAD REALIGNMENT

For all pages, REPLACE the word “work” with “services”.

Under **The Engineer Agrees**:

Page 1, Item 1, after “and checked below”, ADD “and as clarified in Exhibit B.”

Pages 2 and 3, DELETE paragraphs 1 through 5, inclusive, and REPLACE with the following:

- “1. To pay ENGINEER within 15 days following LA’s approval of ENGINEER’s invoices as compensation for all services performed as stipulated in Paragraphs 1, 2, 3, 5, and 6, under “**The ENGINEER Agrees**”, on a Cost Plus Fixed Fee basis according to the Schedule of Compensation contained in Exhibit B of the Agreement for the successful completion of services. The total compensation shall not exceed \$30,193.27.
- a) For progressive payments: Upon receipt of monthly invoices from ENGINEER and the approval thereof by the LA, monthly payments for the services performed shall be due and payable to ENGINEER, such payments to be equal to the value of the services minus all previous partial payments made to ENGINEER.
  - b) Final Payment: Upon approval of the services by the LA, but not later than 60 days after the services are completed and reports have been made and accepted by the LA and DEPARTMENT, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of progressive payments previously paid to ENGINEER shall be due and payable to ENGINEER.”

Under **It is Mutually Agreed**, page 3:

DELETE paragraph 3 in its entirety.

ADD the following after paragraph 4:

- “5. ENGINEER shall not commence performance of any services under this Agreement until the LA has issued a written Notice to Proceed.”

**SCOPE OF SERVICES**

**NOE ROAD BRIDGE REMOVAL AND ROAD REALIGNMENT**

Roadway Drawing Revisions (84 hours)

To accommodate superelevation rate adjustment from 8 percent to 4 percent requested by the LA, revisions to the roadway drawings and specifications are necessary. Below is a list of drawings to be revised:

- Typical Sections  
Revisions to superelevation tables and details.
- Alignment, Ties and Benchmarks  
Revisions to the alignment and alignment information.
- Plan and Profile  
Revisions to labeling and line work to reflect the adjusted alignment.
- Erosion Control Plan  
Revisions to labels and line work.
- Drainage and Utility Plan  
Revisions to labels, ditch design, and line work.
- Grading Plan  
Preparation and revisions to the grading plan because of changes in ditch and roadway alignment locations.
- Pavement Marking and Landscaping  
Revisions to labels and line work.
- Cross Sections  
Revisions to the cross sections to incorporate the new superelevation rate and alignment.
- Quantities  
Revisions to quantity calculations for each of the quantities affected by the change in alignment.

Quality Control (12 hours)

Provide quality control review of the prefinal and final submittals after the adjustments have been made.

Wetland Delineation, Report, and Permitting (68 hours)

1. Perform field wetland delineation according to United States Army Corps of Engineers (USACE) 1987 manual and 2012 (or most recent) applicable regional supplements; provide a wetland delineation report; and prepare USACE, State, and LA wetland delineation review or jurisdictional determination request forms as provided on the USACE website. Delineation will be according to the cumulative project limits of existing and proposed right-of-way. The wetland delineation will involve collecting: soil, hydrology, and plant data; compilation of existing topographic, hydrologic, and soils mapping; and a brief wetland delineation report transmitting the results of the field services and map review. Jurisdictional determination review forms will be provided as an attachment to the delineation for review and use by the USACE.
2. Communicate with USACE, state, or LA agencies regarding wetland delineation, jurisdictional determinations, and potential permitting requirements for the subject area. Complete a minor alternatives analysis with engineers/staff (if wetlands found on-site). If required and if an alternatives analysis indicates that wetlands cannot be avoided, apply for USACE Section 404 permit and Section 401 State/County Water Quality Certification or regional permit. LA shall pay associated permit application fees.

Right-of-Way Plats

By SUBCONSULTANT- See attached Scope of Services.

Schedule

Services will begin up receipt of Notice to Proceed from LA, which is expected by July 15, 2013. Services will be completed on or before July 1, 2014.

**PAYROLL ESCALATION TABLE  
FIXED RAISES**

FIRM NAME STRAND ASSOCIATES, INC.  
PRIME/SUPPLEMENT SUPPLEMENT #1

DATE 07/11/13  
PTB NO. \_\_\_\_\_

CONTRACT TERM 12 MONTHS  
START DATE 7/15/2013  
RAISE DATE 7/1/2014

OVERHEAD RATE 167.80%  
COMPLEXITY FACTOR \_\_\_\_\_  
% OF RAISE 3.00%

**ESCALATION PER YEAR**

7/15/2013 - 7/1/2014

12  
12

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

= 100.00%  
= 1.0000

**The total escalation for this project would be:**

0.00%





**COST PLUS FIXED FEE  
COST ESTIMATE OF CONSULTANT SERVICES**

Exhibit C

**FIRM**  
**PSB**  
**PRIME/SUPPLEMENT**

**STRAND ASSOCIATES, INC.**

**OVERHEAD RATE**  
**COMPLEXITY FACTOR**

1.678  
0

**DATE**

DF-824-039  
07/11/13

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
ROADWAY DRAWINGS	84	3,306.28	5,547.94	1,275.00	1,223.32	\$100.00			11,452.54	37.93%
QUALITY CONTROL	12	724.52	1,215.74	142.50	268.07	\$0.00			2,350.84	7.79%
WETLAND DELINEATION, REPORT, & PERMITTING	68	2,585.14	4,337.86	927.50	956.50	\$501.70			9,308.71	30.83%
ROW PLATS							7,081.18		7,081.18	23.45%
Subconsultant DL					0.00				0.00	0.00%
<b>TOTALS</b>	164	6,615.94	11,101.55	2,345.00	2,447.90	601.70	7,081.18	0.00	30,193.27	100.00%

**AVERAGE HOURLY PROJECT RATES**

FIRM STRAND ASSOCIATES, INC.  
 PSB \_\_\_\_\_  
 PRIME/SUPPLEMENT SUPPLEMENT #1

DATE 07/11/13

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			ROADWAY DRAWINGS			QUALITY CONTROL			WETLAND DELINEATION			ROW PLATS					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
PRINCIPAL	69.67	10	6.02%	4.20	4	4.76%	3.32	4	33.33%	23.22	2	2.94%	2.05						
PROJECT MANAGE	55.73	40	24.10%	13.43	20	23.81%	13.27	8	66.67%	37.15	12	17.65%	9.83						
STRUCTURAL ENG	49.50	0									0								
PROJECT ENGINEE	33.04	80	48.19%	15.92	40	47.62%	15.73				40	58.82%	19.44						
TECHNICIAN	29.57	32	19.28%	5.70	20	23.81%	7.04				12	17.65%	5.22						
CLERICAL	25.15	4	2.41%	0.61							4	5.88%	1.48						
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
<b>TOTALS</b>		166	100%	\$39.86	84	100.00%	\$39.36	12	100%	\$60.38	68	103%	\$38.02	0	0%	\$0.00	0	0%	\$0.00

**Direct Costs**

**XEROX (In-House)**

TASK	QTY	RATE	TOTAL
ROADWAY DRAWINGS	300	\$0.15	\$45.00
QUALITY CONTROL	150	\$0.15	\$22.50
WETLAND DELINEATION, REPORT, & PERMITTING	150	\$0.15	\$22.50
<b>TOTALS</b>	<b>600</b>		<b>\$90.00</b>

**MILEAGE (Outside)**

TASK	(V=vehicle, T=trip, M=miles)	MILES	RATE	TOTAL
ROADWAY DRAWINGS		0	\$0.565	\$0.00
QUALITY CONTROL		0	\$0.565	\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING	1VX2TX90M	180	\$0.565	\$101.70
<b>TOTALS</b>		<b>180</b>		<b>\$101.70</b>

**CADD (In-House)**

TASK	QTY	RATE	TOTAL
ROADWAY DRAWINGS	70	\$15.00	\$1,050.00
QUALITY CONTROL	4	\$15.00	\$60.00
WETLAND DELINEATION, REPORT, & PERMITTING	16	\$15.00	\$240.00
<b>TOTALS</b>	<b>90</b>		<b>\$1,350.00</b>

**WORD PROCESSING (In-House)**

TASK	QTY	RATE	TOTAL
ROADWAY DRAWINGS	10	\$15.00	\$150.00
QUALITY CONTROL	4	\$15.00	\$60.00
WETLAND DELINEATION, REPORT, & PERMITTING	40	\$15.00	\$600.00
<b>TOTALS</b>	<b>54</b>		<b>\$810.00</b>

**POSTAGE (Outside)**

TASK	TOTAL
ROADWAY DRAWINGS	\$100.00
QUALITY CONTROL	\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING	\$50.00
<b>TOTALS</b>	<b>\$150.00</b>

**MISC. EQUIPMENT (Outside)**

TASK	DESCRIPTION	DAYS	RATE	TOTAL
ROADWAY DRAWINGS				\$0.00
QUALITY CONTROL				\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING	GPS WITH/PHONE	1	\$350.00	\$350.00
		1		
<b>TOTALS</b>				<b>\$350.00</b>

**PHONE (In-House)**

TASK	DESCRIPTION	UNITS	RATE	TOTAL
ROADWAY DRAWINGS		60	\$0.50	\$30.00
QUALITY CONTROL		0	\$0.50	\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING		30	\$0.50	\$15.00
		90		
<b>TOTALS</b>				<b>\$45.00</b>

**MYLAR PRINTS / COLOR COPIES (In-House)**

TASK	DESCRIPTION	SHEETS	RATE	TOTAL
ROADWAY DRAWINGS			\$1.00	\$0.00
QUALITY CONTROL			\$1.00	\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING	Reports	50	\$1.00	\$50.00
		50		
<b>TOTALS</b>				<b>\$50.00</b>

**OUTSIDE SERVICES (Outside)**

TASK	TOTAL
ROADWAY DRAWINGS	\$0.00
QUALITY CONTROL	\$0.00
WETLAND DELINEATION, REPORT, & PERMITTING	\$0.00
ROW PLATS	\$7,081.18
<b>TOTALS</b>	<b>\$7,081.18</b>

**PROJECT TOTAL DIRECT COST= \$10,027.88**

**COST BREAKDOWN**

	In-House	Outside	By Others
ROADWAY DRAWINGS	\$1,275.00	\$100.00	
QUALITY CONTROL	\$142.50	\$0.00	
WETLAND DELINEATION, REPORT, & PERMITTING	\$927.50	\$501.70	
ROW PLATS	\$0.00		\$7,081.18
<b>TOTAL</b>	<b>\$2,345.00</b>	<b>\$601.70</b>	<b>\$7,081.18</b>

**GRAND TOTAL \$10,027.88**



**JORGENSEN & ASSOCIATES, INC.**  
**CONSTRUCTION and LAND SURVEYORS**  
*Est. 1990*

---

April 29, 2013

Ms. Vanessa L. Martin, P.E.  
Strand Associates, Inc.  
1170 South Houbolt Road  
Joliet, Illinois 60431

Re: McHenry County D.O.T. – Noe Road Land Acquisition Supplemental No. 2 Survey  
Proposal

Dear Ms. Martin:

Enclosed, please find our second supplemental survey proposal to prepare a statutory plat of highways, plat of vacation and legal descriptions for the referenced project.

Should you have any questions, comments or require any further information concerning our proposal, please feel free to call me at (847)356-3371.

Respectfully submitted,  
Jorgensen & Associates, Inc.

A handwritten signature in black ink that reads "Christian H. Jorgensen" with a long horizontal flourish extending to the right.

Christian H. Jorgensen, P.L.S.  
President

CHJ/pt

Enclosures

E:\Strand\NoeRd\Supplemental #2\LTR

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Exhibit "A"**

**Hourly Rate Range - Consultant's Regular Staff**

<u>Classification</u>	<u>From</u>	<u>To</u>
Principal, Manager, P.L.S.	40.00	42.00
Supervisor, Project Surveyor	39.00	41.00
Cadd Supervisor, Survey Party Chief, S.I.T., Survey Party Chief	21.50	28.50
Instrument Operator, Cadd Operator, assignable Clerical and Secretarial Labor	14.00	20.00

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Exhibit "B"**

Payroll Burden & Fringe Costs

	<u>% of Direct Productive Payroll</u>
Federal Insurance Contributions Act _____	11.71%
State Unemployment Compensation _____	1.81%
Federal Unemployment Compensation _____	0.16%
Workmen's Compensation Insurance _____	1.88%
Paid Holidays, Vacation, Sick Leave, Personal Leave _____	12.20%
Bonus _____	5.05%
Pension _____	0.87%
Group Insurance _____	<u>36.25%</u>
Total Payroll Burden & Fringe Costs	69.93%

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Exhibit "C"**

Overhead and Indirect Costs

	<u>% of Direct Productive Payroll</u>
Business Insurance _____	4.70%
Depreciation _____	14.08%
Indirect wages and salaries _____	42.12%
Reproductive and printing costs _____	0.19%
Office Supplies _____	3.93%
Computer Costs _____	1.27%
Professional Fees _____	1.64%
Telephone _____	2.06%
Fees, license & dues _____	1.14%
Repairs and maintenance _____	0.50%
Business space rent _____	5.37%
Facilities - capital _____	0.88%
Travel - Meals _____	0.09%
Survey Supplies _____	3.02%
Automobile/travel expense _____	5.39%
Equipment Rental _____	1.00%
Miscellaneous Expense _____	0.70%
State Income Tax _____	0.50%
Postage _____	0.24%
Educational & Professional Registrations _____	<u>0.96%</u>
Total Overhead	89.78%



Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Exhibit "D"**

Classification Types & Rates

Sheet 1 of 2

- A. Supervisor, P.L.S.
- B. Survey Party Chief, S.I.T.
- C. Instrument Operator
- D. Cadd Supervisor

Classification Rates used for Calculation of Fee

<b>A. Supervisor, P.L.S. ....</b>	<b>\$ 40.00</b>
<b>B. Survey Party Chief, S.I.T. ....</b>	<b>\$ 22.00</b>
<b>C. Instrument Operator ....</b>	<b>\$ 18.25</b>
<b>D. Cadd Supervisor ....</b>	<b>\$ 27.50</b>

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Exhibit "D"**

Average Hourly Rate Calculation

Sheet 2 of 2

Supervisor, P.L.S.	14 hours @ \$40.00/hour	=	\$	560.00
Survey Party Chief, S.I.T.	19 hours @ \$22.00/hour	=	\$	418.00
Instrument Operator	19 hours @ \$18.25/hour	=	\$	346.75
Cadd Supervisor	<u>30 hours</u> @ \$27.50/hour	=	\$	<u>825.00</u>
	82 hours		\$	2,149.75

$$\text{Average Hourly Rate} = \frac{\$2,149.75}{82} = \$26.22/\text{hour}$$

Route: Noe Road  
 Section:  
 Project:  
 County: McHenry  
 Job No.:

COST ESTIMATE OF CONSULTANT'S SERVICES

Consultant: Jorgensen & Associates, Inc.  
 Date: April 29, 2013  
 No. of Parcels: 3

Cost Plus Fixed Fee = 14.5% [(2.3 + R)DL + IHDC]

Item	Number of Man Hours (A)	Payroll (B)	Overhead & Fringe Benefits (C)	In-house Direct Costs (D)	Sub-Total (E)	Profit (F)	Services By Others	Total	Percent of Grand Total
1) Pre-Survey Phase	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$640.00	\$640.00	9.04%
2) Survey Reconnaissance	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N/A	\$0.00	0.00%
3) Project Survey Plan	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N/A	\$0.00	0.00%
4) First Submittal Plat of Highways and Descriptions	15	\$425.00	\$678.77	\$5.00	\$1,108.77	\$142.46	N/A	\$1,251.23	17.67%
5) Survey (Field)	38	\$764.75	\$1,221.38	\$88.00	\$2,074.13	\$267.80	N/A	\$2,341.94	33.07%
6) Survey (Office)	2	\$80.00	\$127.77	\$0.00	\$207.77	\$26.68	N/A	\$234.45	3.31%
7) Final Submittal Plat of Highways and Descriptions	3	\$95.00	\$151.72	\$0.00	\$246.72	\$31.68	N/A	\$278.41	3.93%
8) Coordination Meetings	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N/A	\$0.00	0.00%
9) QC/QA	4	\$135.00	\$215.61	\$0.00	\$350.61	\$45.02	N/A	\$395.63	5.59%
10) Plat of Vacation - Noe Road	20	\$650.00	\$1,038.12	\$30.25	\$1,718.37	\$221.16	N/A	\$1,939.53	27.39%
<b>TOTALS</b>	<b>82</b>	<b>\$2,149.75</b>	<b>\$3,433.37</b>	<b>\$123.25</b>	<b>\$5,706.37</b>	<b>\$734.81</b>	<b>\$640.00</b>	<b>\$7,081.18</b>	<b>100.00%</b>

Route : Noe Road  
Section:  
County: McHenry  
Job No.:

**Manhour Breakdown  
Land Acquisition Estimate**

Length of Project

Noe Road	+ <u>5,346'</u> = 1.013 miles
Total Length	± 5,346' = 1.013 miles

3 Parcels: 3 Fee Simple (2 revised, 1 additional)

1. Pre-Survey Phase

Research available records

a.	Title Co.	)		
		)		
b.	Recorder's Office	)		
		)		
c.	McHenry D.O.T.	)		
		)		
d.	Utilities	)		
		)		
e.	Private Surveyors	)		
		)		
f.	Land Owners	)		<u>0 MH</u>

Sub-total Item # 1      0 MH

2. Reconnaissance Survey      2 Men      0 MH

3. Project Survey Plan      ± 2,640'/sheet - 2 sheets

a.	Alignment info	)		
		)		
b.	Existing R.O.W. info	)		
		)		
c.	Land line data	)		
		)		
d.	Subdivision data	)		<u>0 MH</u>

Sub-total Item #3      0 MH

4.	First Submittal Plat of Highways & Descriptions		
a.	Ownership info	)	
		)	
b.	Total holding boundaries	)	
		)	
c.	Total holding area listing	)	0 MH
		)	
d.	Private survey info	)	
		)	
e.	Deed calculated closures	)	
f.	Layout and drafting	$\pm 1,100'/\text{sht.} \pm 1 \text{ sheet}$	
		$12 \text{ hrs./sheet} \times 1 =$	12 MH
	Total Holding sheets		0 MH
	Alignment & Ties sheets	$2 \text{ hrs./sheet} \times 1 =$	2 MH
g.	Legal descriptions	1 description	<u>1 MH</u>
		Sub-total Item #4	15 MH

5.	Survey (Field)		
a.	Center line alignments & ties		
	Existing Noe Road	- 5,279' - 3 hrs. x 2 men =	6 MH
	Existing Carmack Road	- 1,100' - 3 hrs. x 2 men =	6 MH
b.	Verify existing control points		
	6 hours x 2 men =		12 MH
c.	Establish additional control points		0 MH
d.	Monument & tie proposed right of way		
	7 hours x 2 men =		<u>14 MH</u>
		Sub-total Item #5	38 MH

6.	Survey (Office)	
a.	Compute traverse	0 MH
b.	Compute existing right of way, section lines & property boundaries	0 MH
c.	Compile appraisal topography	0 MH
d.	Compute center line alignments 1 hour x 1 man =	1 MH
e.	Compute proposed right of way 1 hour x 1 man =	<u>1 MH</u>
	Sub-total Item #6	2 MH
7.	Final Submittal Plat of Highways & Descriptions	
a.	Final drafting $\pm$ 1 sheet 2 hours x 1 man =	2 MH
b.	Prepare & record "Monument Record"	0 MH
c.	Final descriptions 1 description	1 MH
d.	Assembly of final papers	<u>0 MH</u>
	Sub-total Item #7	3 MH
8.	Coordination Meetings	0 MH

9.	QC/QA		
	a.	Check preliminary plat of highways 1 sheet	1 MH
	b.	Check preliminary legal descriptions 1 legal description	1 MH
	c.	Check final plat of highways 1 sheet	1 MH
	d.	Check final legal descriptions 1 legal description	<u>1 MH</u>
		Sub-total Item #9	4 MH
10.	Plat of Vacation Noe Road		
	a.	Compute areas of vacation 1 hour x 1 man =	1 MH
	b.	Layout and drafting - 2 sheets 12 hours x 1 man =	12 MH
	c.	Legal descriptions & certificates 4 hours x 1 man =	4 MH
	d.	Check plat of vacation 2 sheets	<u>3 MH</u>
		Total All Items	82 MH

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

### Manhour Breakdown By Item

<u>Item</u>	<u>Classification</u>	<u>Manhours</u>
1) Pre-Survey		
2) Survey Reconnaissance		
3) Project Survey Plan		
4) First Submittal Plat of Highways	Supervisor, P.L.S. Cadd Supervisor	1 14
5) Survey (Field)	Survey Party Chief, S.I.T. Instrument Operator	19 19
6) Survey (Office)	Supervisor, P.L.S.	2
7) Final Submittal Plat of Highways	Supervisor, P.L.S. Cadd Supervisor	1 2
8) Coordination Meetings		
9) QC/QA	Supervisor, P.L.S. Cadd Supervisor	2 2
10) Plat of Vacation Noe Road	Supervisor, P.L.S. Cadd Supervisor	8 12



Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Breakdown of  
In House Direct Costs**

Item

4. First Submittal Plat of Highways & Descriptions

a. Plat of Highways Mylars  
1 sheet @ \$5.00/sheet = \$ 5.00

5. Survey (Field)

a. Trips to project site - 2 ea.  
± 80 miles/trip x 2 trips = ± 160 miles  
± 160 miles @ \$0.55/mile = \$ 88.00

10. Plat of Vacation Noe Road

a. Deliver Final Mylars to McHenry County D.O.T.  
± 55 miles/trip x 1 trip = ± 55 miles  
± 55 miles @ \$0.55/mile = \$ 30.25

Total All Items \$ 123.25

Route: Noe Road  
Section:  
County: McHenry  
Job No.:

**Breakdown of  
Services By Others**

Item

1. Pre-Survey Phase

a. Commitment for Title Insurance Letters 2 Commitments @ \$320.00 each =	\$ 640.00
--	-----------