# **DISTRICT # 2 & #6**

# **VILLAGE OF LOMBARD** REQUEST FOR BOARD OF TRUSTEES ACTION For Inclusion on Board Agenda

X	Resolution or Ordinance (B Recommendations of Board Other Business (Pink)		
TO:	PRESIDENT AND BOARD	D OF TRUSTEES	
FROM:	Scott Niehaus, Village Man	ager	
DATE:	September 12, 2016	(COW) (B of T)	Date: September 15, 2016
TITLE:	Roosevelt Rd Water Main I Resident Engineering Servi		
SUBMITTED BY:	Al Stefan, P.E., Village Eng	gineer AS	
BACKGROUND/PC	DLICY IMPLICATIONS:		
Provision of full time project, Phase II.	construction observation/ins	spection services for the	e Roosevelt Rd Water Main Lining
FISCAL IMPACT/I	FUNDING SOURCE:		
Total Contract Amou Total CIP Budget Am NWS Project Numbe Account: Water/Sew	nount: \$314,000.00	715.75420	
Review (as necessary			
Village Attorney X_			Date
Finance Director X_			Date
village ivianager X			Date
NOTE:	All materials must be subm Manager's Office by 12:00 Distribution.		the state of the s

AGENDA DOC



To: Scott Niehaus, Village Manager

Through: Carl Goldsmith, Director of Public Works

From: Al Stefan, P.E., Village Engineer

Date: September 12, 2016

Subject: Roosevelt Road Water main Lining, Phase II

Resident Engineering Services

Attached please find a resolution, contract and fee schedule regarding resident engineering services for the Roosevelt Road Water Main Lining project, East Phase.

Thomas Engineering Group, LLC (TEG) is the resident engineering for the Roosevelt Road Water Main Lining, Phase I, constructing in 2016. TEG has been providing the level of services met the expectation of the Village. The selection of TEG as the resident engineering firm was made from the FY 2014/2015 Resident Engineering Short List. The resident engineering short list is comprised of five (5) firms. The Short List has been extended through December 31, 2016.

Based on the excellent professional services provided by the TEG for the Phase I, and TEG is familiar to the water main lining processes, the Public Works staff recommends TEG to be the resident engineer for the Roosevelt Road Water Main Lining, Phase II.

The scope and fee were negotiated with Thomas Engineering Group, LLC and agreed to by both parties. The not-to-exceed fee for resident engineering services is \$309,127.74.

Please present this agreement and resolution to the President and Board of Trustees for their review at their regular meeting of September 15, 2016. If approved, please return three original signed copies to Public Works-Engineering for further processing.

# RESOLUTION R 16

# A RESOLUTION AUTHORIZING SIGNATURE OF PRESIDENT AND CLERK ON AN AGREEMENT

WHEREAS, the Corporate Authorities of the Village of Lombard have received an Agreement between the Village of Lombard, and Thomas Engineering Group, LLC for the Roosevelt Rd Water Main Lining Phase II project as attached hereto and marked Exhibit "A", and

WHEREAS, the Corporate Authorities deem it to be in the best interest of the Village of Lombard to approve such agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS as follows:

**SECTION 1:** That the Village President be and hereby is authorized to sign on behalf of the Village of Lombard said agreement as attached hereto.

**SECTION 2:** That the Village Clerk be and hereby is authorized to attest said agreement as attached hereto.

Adopted this 15<sup>th</sup> day of September, 2016.

Village Clerk



# VILLAGE OF LOMBARD CONTRACT

# CONTRACT DOCUMENT NUMBER WA-12-03 Roosevelt Road Water Main Lining, Phase II Resident Engineering Service

This agreement is made this 15<sup>th</sup> day of September, 2016, between and shall be binding upon the VILLAGE of Lombard, an Illinois Municipal Corporation hereinafter referred to as the "VILLAGE" and Thomas Engineering Group, LLC. hereinafter referred to as the "ENGINEER" and its successors.

Witnessed, that in consideration of the mutual promises of the parties delineated in the contract documents, the ENGINEER agrees to perform the services and the VILLAGE agrees to pay for the following services as set forth in the contract documents:

Resident Engineering services for Roosevelt Rd Water Main Lining, Phase II

- 1. This contract shall embrace and include all applicable contract documents listed below as if attached hereto or repeated herein:
  - a. Request for Qualifications and Request for Proposal (December 13, 2013) consisting of the following:
    - i) Cover Sheet
    - ii) Table of Contents
    - iii) General Provisions
    - iv) Special Provisions
    - v) Request for Qualifications and Proposals for Resident Engineering Short-List
    - vi) Instructions Regarding the Consultant Evaluation Form
    - vii) Instructions Regarding the Statement of Qualifications Form
    - viii) Consultant Evaluation Form
    - ix) Statement of Qualifications Form
  - b. ENGINEER'S Proposal Dated September 9, 2016
  - c. ENGINEER'S Work Effort and Fee Dated September 8, 2016
  - d. Required Certificates and Signatures and Certificate of Insurance
- 2. The VILLAGE agrees to pay, and the ENGINEER agrees to accept as full payment for the services, which are the subject matter of this contract in accordance with the General Provisions.
- 3. This Contract represents the entire agreement between the parties and may not be modified without the written approval of both parties.

Page 2 of 3 Contract Document Number WA-12-03 Roosevelt Rd WM Lining, Phase II

IN WITNESS WHEREOF, the Village of Lombard, Illinois by Keith Giagnorio, Village President, and the ENGINEER have hereunto set their hands this 15<sup>th</sup> day of September, 2016.

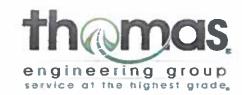
Legistar: 160385

If an individual or partnership, all individual names of each partner shall be signed or if a corporation, an officer duly authorized shall sign here: Thomas Engineering Group, LLC Accepted this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2016. Individual or Partnership \_\_\_\_\_ Corporation \_\_\_\_ By Position/Title Position/Title By THE VILLAGE OF LOMBARD, ILLINOIS Accepted this 15<sup>th</sup> day of September, 2016. Keith Giagnorio, Village President Attest: Sharon Kuderna, Village Clerk

# VILLAGE OF LOMBARD ENGINEER'S CERTIFICATION

Legistar: 160385

	, having been first duly sworn depose and states as follows:
(Off	ficer or Owner of Company)
(Na	, having submitted a proposal for:
	osevelt Rd Water Main Lining, Phase II to the Village of Lombard, hereby certifies that said NGINEER:
1.	has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A) (4).
2.	is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, or if it is:  a. it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the approve Revenue Act; or  b. it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
3.	is in full compliance with the Federal Highway Administration Rules on Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and 382 and that  (Name of employee/driver or "all employee drivers")  is/are currently participating in a drug and alcohol testing program pursuant to the aforementioned rules.
be	By:
No	tary Public



55 west 22nd street

Iombard, illinois 601 48

suite 300

September 9, 2016

Ms. Ying Miao Project Manager Village of Lombard 1051 S. Hammerschmidt Avenue Lombard, Illinois 60148-3926

Re:

Proposal for Contract Document Number WA 12-03

Roosevelt Road Water Main Lining, Phase 2 (East) - Resident Engineering Services

Dear Ms. Miao:

Thomas Engineering Group, LLC (TEG) respectfully submits the enclosed Proposal to the Village of Lombard to provide Resident Engineering Services for the Roosevelt Road Water Main Lining Project, Phase 2 (East Contract).

Our firm is very familiar with Lombard processes, has excellent pertinent experience, and understands fully the purpose and scope of this Project. We understand the Village's expectations and look forward to exceeding them on this Project. TEG is proposing the exact same team for the East Contract that is currently managing the West Contract, except that TEG is proposing to provide the public outreach services without a communications subconsultant.

Our proposed Project Manager, Edward Herlihy, P.E., has gained firsthand knowledge of being a successful Resident Engineer and Project Manager having served in this capacity for over 20 years with many Lombard projects. Mr. Herlihy is currently serving as the Project Manager for the West Phase of the Project. Our proposed Resident Engineer, Matt Champine, P.E., a Lombard resident, is a registered professional engineer with 10 years of experience. Along with his construction management experience, Mr. Champine is an excellent communicator and will be actively involved with the public communications for the Project. Matt is currently serving as the Resident Engineer for the West Phase of the Project.

Please refer to the attached Proposal which outlines the proposed scope of services according to discussions with key Village staff and our experience with Phase 1 services. The proposed resident engineering fees are \$309,127.74 including construction inspection and public outreach described in the Proposal. Please be aware that the construction cost estimate for the East Contract is \$4,273,162.10, according to the Bid Tab dated March 7, 2016. Our proposed labor fees and direct costs are estimated at 7.2% of the estimated construction cost.

If you have any questions or require additional information, please call me at (847) 815-9500 or by e-mail at kevinv@thomas-engineering.com.

Sincerely,

thomas engineering group, llc

Kevin C. VanDeWoestyne, P.E. Municipal Department Head

**Enclosures** 

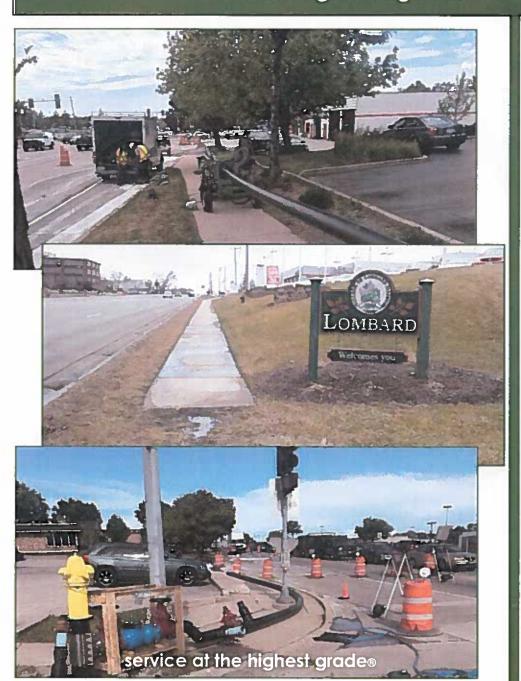
cc/email:

Mr. Thomas Gill, P.E., Thomas Engineering Group, LLC

Mr. Ed Herlihy, P.E., Thomas Engineering Group, LLC

# Proposal

Village Lombard Contract Number WA 12-03 Roosevelt Road Water Main Lining, Phase 2 Resident Engineering Services



Submitted to:



Mr. Carl Goldsmith Director of Public Works 1051 S. Hammerschmidt Avenue Lombard, Illinois 60148-3926 (630) 620-5740

September 9, 2016



Thomas Engineering Group, LLC 55 West 22<sup>nd</sup> Street Suite 300 Lombard, Illinois 60148



**Proposal** 

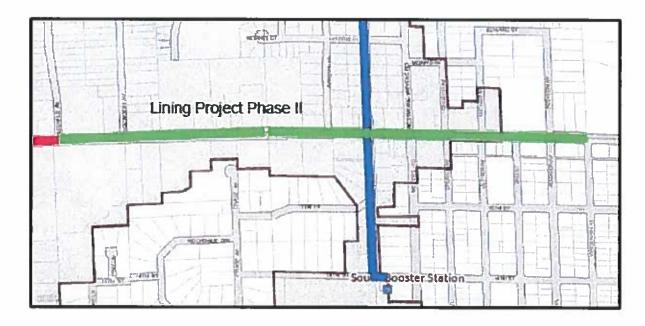
## **Project Understanding**

The existing Illinois Route 38 (Roosevelt Road) water main network is being rehabilitated in order to continue serving Lombard's water customers with high quality water and fire flow demands for the existing population in the community. The Roosevelt Road water main is between 40 and 50 years old and subsequently experiences frequent breaks causing service interruptions and costly repairs. Generally along the corridor a distribution water main, ranging between 8" to 12" diameter, serves as an east-west link along the north and south parkways of Roosevelt Road from approximately 1200' west of Finley Road to Wisconsin Avenue, or roughly 12,500 linear feet of distribution main. Due to the increased maintenance and water main break history along the heavily travelled Route 38 corridor, the existing network is currently planned for a two-stage lining rehabilitation by installation of cured-in-place pipe (CIPP).

Phase 1, the West Contract, includes rehabilitation of approximately 7,000 LF of water main on Roosevelt Road from Finley Road (western Village



limits) to Fairfield Avenue. Phase 2, the East Contract, includes rehabilitation of approximately 9,000 LF of water main on Roosevelt Road from Fairfield Road to Wisconsin Avenue. TEG is currently providing Resident Engineering Services for the Roosevelt Road Water Main Lining Project, Phase 1 (West Contract) and we proposed to provide Resident Engineering Services for Phase 2 (East Contract), as requested by the Village.



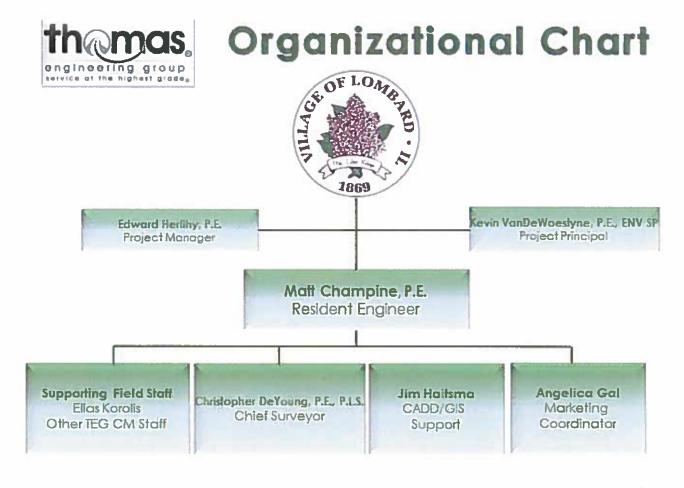


Proposal

While providing Resident Engineering Services for the Roosevelt Road Water Main Lining Project, Phase 1 (West Contract), TEG has developed a thorough understanding of water main lining, Lombard's expectations, and the Village's public communications processes. TEG is proposing the exact same team for the East Contract that is currently managing the West Contract, except that TEG is proposing to provide the public outreach services without a communications subconsultant.

## **Project Team**

Our proposed Project Manager, Edward Herlihy, P.E., is currently serving as the Project Manager for the West Contract and is the proposed Project Manager for the East Contract. Our proposed Resident Engineer, Matt Champine, P.E., a Lombard resident, is a registered professional engineer with 10 years of experience. Mr. Champine is an excellent communicator and will be actively involved with the public communications for the Project. Matt is currently serving as the Resident Engineer for the West Phase of the Project and is the proposed Resident Engineer for the East Phase of the Project. Unlike the West Phase of the project, TEG proposes to perform the public outreach and communications using internal marketing and engineering staff. Angelica Gal, TEG's Marketing Coordinator, will prepare the open house exhibits and coordinate the public outreach for the East Phase of the Project.





Proposal

# **Project Approach and Scope**

TEG proposes to provide the following Scope of Services for the Roosevelt Road Watermain Lining, Phase 2 (East Contract) project. These items are designated in bold lettering. Following is a listing of the scope of services that are anticipated in a logical sequence, and is intended to highlight specific areas where TEG will add value and experience to the project.

### **PRE-CONSTRUCTION PHASE**

- Following the pre-construction meeting, TEG will conduct a constructability review of the contract documents. Review the plans and specifications in depth, verifying quantities, elevations and dimensions relevant to the project. This type of review will identify potential conflicts or issues and allow TEG to develop solutions and discuss with the Village prior to construction.
- Conduct a meeting with Village to discuss goals, objectives, verify documentation requirements, and expectations for the project.
- 3. Conduct a utility meeting with all affected utilities, if any to verify or establish schedules for adjustments.
- 4. Conduct a pre-construction conference with the contractor, the Village and other applicable parties. Obtain from the contractor a list of proposed suppliers and subcontractors, and emergency contact information for the prime and subcontractors. Make recommendations to Lombard regarding the suitability of the subcontractors for the proposed work. Provide meeting minutes to all parties the next business day following the meeting including a contact list for all contractors, subcontractors, material suppliers, and TEG personnel.
- 5. Begin Public Outreach and Communication by coordinating with the Village's key staff.
- 6. Prepare exhibits and PowerPoint presentation, and hold Public Information Meeting with key Village staff at a location to be determined.
- 7. Review contractor's schedule for compliance with contract. No payouts will be allowed until the schedule is approved. Our RE will track actual progress in relation to the approved schedule and hold ongoing discussions with the contractor regarding his progression of work.
- 8. Review all permit requirements and verify contractor is in compliance.
- 9. Set up field books, quantity book, diary and other forms of documentation.
- 10. Explain to the contractor the importance of keeping the required maintenance logs accurate for the work they perform (temporary and permanent).
- 11. Check and approve, or reject and request re-submittal of any submittals made by the contractor for compliance with the contract documents.
- 12. Assist bus companies and garbage collection services with establishing alternate routes during construction.

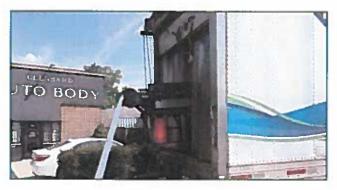




Proposal

### **CONSTRUCTION PHASE**





- 1. Continue Public Outreach and Communication and provide content for Village Website, E-blasts, and Newsletters on a weekly / bi-weekly basis as determined by the Village.
- 2. Observe the progress and quality of the executed work. Determine if the work is proceeding in accordance with the Contract Documents. TEG will maintain daily contact with Village, keeping Lombard informed of the progress of the work, guard Lombard against defects and deficiencies in the work, advise Lombard of all observed deficiencies of the work and disapprove and reject all work failing to conform to the Contract Documents. TEG will also help coordinate efforts between the contractor and any other agency officials that may have an interest in the project.
- 3. Review contractor's schedule on a regular basis and update progress schedule. TEG will compare actual progress to contractor's approved schedule. If progress falls behind, we will work with contractor to take appropriate action to get back on schedule.
- 4. Provide liaison functions to facilitate coordination of utilities (Nicor, AT&T, ComEd, Comcast etc.). Maintain contact with utility companies as frequent as necessary and monitor their contractor's compliance with proposed schedules. Verify that adjustments or relocations are clear of proposed improvements.
- 5. TEG staff will comply with the Village's PPE policy. All staff is equipped with the current certified safety vests and steel toed shoes. Our proposed PM will ensure all TEG staff on the project complies with the Village PPE policies.



- 6. Provide extensive on-site observations of the work in progress and field checks of contractor methods, materials and equipment through the Resident Engineer or Inspector, who will:
  - a) Coordinate with appropriate Public Works departments as necessary as contractor progresses with work on sanitary, storm sewer and water main improvements. Ensure contractor is following applicable Village standards and specifications during installation.
  - b) Serve as the Village liaison with the contractor working principally through the contractor's field superintendent.
  - c) Be present whenever the contractor is performing work on-site, associated with the project.
  - d) Ensure layout is accurate and complete.
  - e) Alert the contractor's superintendent when any work is being performed prior to acceptance of shop drawings or samples and advise the Village when it is necessary to disapprove any work failing to conform to the contract documents.
  - f) Monitor and document erosion control and ensure conformity with the plans and standards.





### Proposal

- g) Keep an inspector's daily report book in Lombard's format, or other required format appropriate for the project, recording hours on the job site, weather conditions, general and specific observations, daily activities, quantities placed, inspections, decisions, and list of visiting officials.
- h) Attend all construction conferences. Arrange a schedule of progress meetings and other job conferences as required. Maintain and circulate copies of records of the meetings.
- Perform daily barricade checks, and frequent overnight checks. Any deficiencies will be noted on a Barricade Check Report that will be sent to the contractor immediately with specific time frames for corrective action, and penalties noted for noncompliance.
- j) Maintain orderly files of correspondence, reports of job conferences, shop drawings, contractor's request for information, and other submissions, reproductions or original contract documents including all addenda, change orders and additional drawings issued subsequent to the award of the contract.
- k) Arrange for any required material testing. Coordinate material testing with the contractor's quality control team and schedule all necessary inspections in order to keep the work proceeding in a timely fashion.
- 1) PREPARE AND COORDINATE THE DISTRIBUTION OF A WEEKLY / BI-WEEKLY / MONTHLY NEWSLETTER FOR RESIDENTS AND BUSINESSES
- m) Prepare payment requisitions and change orders. Review applications for payment with the Contractor for compliance with established submission procedure and forward them with recommendations to Lombard. Provide the Village a regular update on estimated final costs of the project. This will involve timely incorporation of any change orders and accurate quantity take-offs of remaining items.
- Except upon written instructions of Lombard, the Resident Engineer or Inspector shall not authorize any deviation from the Contract Documents.
- o) TEG staff has portable laptops and smart phones which enable staff to remotely communicate (via email). TEG prefers to have its staff in the field than in the field office. This allows TEG staff to verify files and resources in the field (vehicle) in lieu of leaving the site to look up a reference in the field office. Having a laptop with internet access is a necessity for being efficient.
- p) Shop Drawings and Contractor Submittals:
  - a. Record data received, maintain a file of drawings and submissions, and check construction for compliance with them.
  - b. Review Contractor's submittals for compliance with contract documents. Notify the Village of any deviations or substitutions. With the notification, provide the Village with a recommendation for acceptance or denial, and request direction from the Village regarding the deviation or substitution.
  - c. Alert the Contractor's field superintendent when materials or equipment are being installed before approval of shop drawings or samples, where such are required, and advise the Village when it is necessary to disapprove work as failing to conform to the Contract Documents.
- g) Record Drawings:
  - a. Document the location (vertically and horizontally) of sewer and water services.
  - b. Maintain a set of Record Drawings on which all changes are noted. Deliver both a





# Village of Lombard Resident Engineering Services

# Roosevelt Road Watermain Lining, Phase 2 – East Contract

Proposal

reproducible set of drawings and AutoCAD drawing file(s) on CD ROM to the VILLAGE at the completion of the Project.

- c. The Resident Engineer shall deliver a draft of the record drawings for the underground utilities within one month of the substantial completion of the construction of the underground utilities.
- d. Collect GIS coordinates for key features as required by the Village, including the cost and installation date of the feature being installed, for incorporation into the Village's asset management software program.
- r) Expedite project close-out by providing final quantity measurements to the contractor throughout the project, instead of waiting until the end.
- s) Expedite acceptance of the project by maintaining a running punch list that informs the contractor of any deficient items and allows them time to correct deficiencies during the course of construction.
- t) Prior to final inspection, submit to the contractor a list of observed items requiring correction and verify that each correction has been made.
- u) Conduct a final inspection with the Village and prepare a final punch list of corrective or incomplete work.
- v) Verify that all items on the final list have been corrected and make recommendations to Lombard concerning project acceptance.

TEG's entire Construction staff is currently certified in IDOT's Documentation of Contract Quantities.

TEG hosts IDOT's Bureau of

Materials for an IDOT Closeout

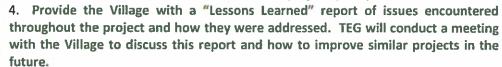
Procedures seminar to assist

with our quality assurance.

### POST-CONSTRUCTION AND PROJECT CLOSE-OUT

- Follow the IDOT guidelines for project closeout process. Although this is not an IDOT administered project, following these guidelines helps expedite the job closeout process.
- Expedite final acceptance by obtaining material inspections and certifications before the items are incorporated in the project;
- 3. The Resident Engineer shall deliver a draft of the record drawings for the

underground utilities within one month of the substantial completion of the construction of the underground utilities. This submittal shall include the individual service location sheets. TEG understands the need to close out a project quickly,



- 5. Post-process GIS survey data and provide data to Village that is compatible with the Village's GIS system.
- 6. Deliver job boxes and all project records to Village.

# Bros Department of Transportation on American Patric Strong American Patric Strong Association Procedures Seminar ESST Region 1 Cities Schamman & Schamman & 2008

### **Exclusions**

1. The Village is responsible for administration of IEPA Public Water Supply Loan Funding. Therefore, this service is excluded from the Scope of Services and associated cost described herein.





Proposal

# **Cost Proposal**

The following content represents what TEG has developed in terms of engineering work effort necessary to provide the Village with Resident Engineering Services for the Roosevelt Road Watermain Lining, Phase 2 – East Contract, as described herein. The anticipated work effort and duration of professional services, found in the Attachments, is based on past exchanges of information with the Village and our understanding of the services, as provided in Phase 1 – West Contract.

We have utilized a direct labor multiple (DLM) contract type and a standard factor of 2.83 to calculate our cost estimate for consultant services (CECS). While we believe this estimate accurately reflects our understanding of Project described in our Proposal, we understand that the Village may interpret the scope of differently and may seek to add, subtract, or modify the scope or level of effort contained herein. We look forward to being selected by the Village and can negotiate the scope and effort to meet the exact expectations of the Village.

The proposed resident engineering fees are \$309,127.74 including construction inspection and public outreach described in the Proposal. Please be aware that the construction cost estimate for the East Contract is \$4,273,162.10, according to the Bid Tab dated March 7, 2016. Our proposed labor fees and direct costs are estimated at 7.2% of the estimated construction cost.

Please reference the following pages for greater detail of our estimate.

# Village of Lombard - Roosevelt Road Watermain Lining - 2017

Contract Document No.:

WA 12-03

# **Exhibit A: Staff Hours Worksheet**

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Role	Staff	ENDII C-MEEK b	12/b/E	12/3/5	2/62/1	2/22/5	2/92/9	Z/ZZ/L	z/61/e	2/91/6	/#T/OT	/11/11	2/6/21	7/8/5	Z/E/Z	Total Hours
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Project Manager	H		0	2	20	20	20	20	20	20	20	15	4	2	P	163
Resident Engineer	MC		0	72	78	220	220	220	220	220	220	200	160	20	0	1850
Layout Checks/Record Drawings	CD		0	0	4	0	10	0	10	0	10	0	10	0	P	4
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PR Manager	КУЕН		0	0	16	0	0	0	0	0	0	٥	0	0	0	16
PR Prepapration	AG		0	0	40	O	0	0	0	0	0	0	0	0	0	40
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	TOTAL PR HOURS							99							Г	2421

Public Outreach Materials and Printing = Lump Sum Estimate - to be billed at no mark up 0 0 0 0 0 Vehicle Days @ \$65/day In-House Direct Costs:

# Subconsultants

Classification	None
	lone

# Assumptions:

-Contractor April start + 210 Cal. Days + 10 Days = 11/7/17 End Date.
-Post-Construction @ 4 weeks full time + 2 weeks part time (Documentation Closeout)
-No Material Testing in TEG contract unless requested as extra service.
-AII PR by TEG & VOL.

-DLM set at 2.83.
-RE @ 50 to 55 hrs/wk.
-RE completes record drawings.
-IDOT allows concurrent EB & WB permanent closures.
-Inspection assistance for RE at 1 day per week B hrs per day to allow for office time.

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7	GIS Coordination															
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	Total Hours		10 00	171 00	1660 00	256.00	44 00	40 00	40 00		2421.00	8729.00	\$0.00	\$308,407,74	\$309,127.74	100 00%
	No.	-	KCV	EJH.	MFC	¥	CJD	폭	ĄG							
	Hourty Rate		\$70.00	\$70.00	\$45.50	\$27.50	\$48 50	\$40.60	\$22 00							
	Hourly Rate z DLM	_	\$198 10	\$196.10	1120 77	\$77.83	\$1.17.28	2114 80	\$42.28							
	Cost		\$1,981.00	\$13,875.10	1239,502,90	\$19,023.20	\$6,039.22	\$4,595.92	\$2,490.40							
	Total De ect Costs (See attached Eubbit D for expense calculations)				<u>ٺ</u>	Firm's approved	rates on the with	inouty.								_
	Total Services By Others (See attached calculations)	ì		Markup on Exp	Š	Juneau of Accoun	name and Audeng	-								
		_	Š	and not soon t	3	Proposed Multiple	er = 2 83 (See Ex	rhibit C)								
	Total Engineering Fee	\$309,127.74	Budgeted As	e. Hourty Rate: \$	1127.39											
	Project:  Tela  PRE-CONST    2   2   2   2   2   3   4   4   4   4   6   6   6   7   7   7   7   7   7   7   7   7   7	171:	THEV. BAIDOLS  R	Total De et Cess   See stached Exists	Total De et Cess   See stached Exists	Feet   Rosewell Road Water Main Lining Project, Phase 2 (East Contract)	Feet   Rosewell Road Water Main Lining Project, Phase 2 (East Contract)	Feetune   Feet	Feetawad	Percent Road Water Main Lining Project, Phase 2 (East Contract)   Percent Road Water Main Lining Project, Phase 2 (East Contract)   Percent Road Water Main Lining Project, Phase 2 (East Contract)   Percent Road Water Main Lining Project, Phase 2 (East Contract)   Percent Road Water Main Lining Project, Phase 2 (East Contract)   Percent Road Road Road Road Road Road Road Road	Force   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed	Force   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed	Force   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed   Road Water Main Lining Project, Phase 2 [East Contract)   Factories   Processed	The Control of Contr	Fig. 19   Fig.	The control of the

# EXHIBIT C COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

DATE 1.4648 OVERHEAD RATE COMPLEXITY FACTOR FIRM Thomas Engineering Group, LLC

09/08/16

				COST ESTIMATE USING FIXED FEE	JSING FIXED FE	iii iii			
			OVERHEAD	IN-HOUSE		Outside	Outside SERVICES		% OF
ITEM	MANHOURS	PAYROLL	=5	DIRECT	FIXED	Direct	BY	TOTAL	GRAND
			FRINGE BENF	COSTS	PEE	Costs	OTHERS		TOTAL
	(A)	(B)	(c)	(O)	(E)	Œ	( <u>Q</u>	(8-6)	
Public Outreach and Communication	99	2,455.00	3,596.08	720.00	908.35			\$ 7,679.43	2.48%
Pre-Construction	92	3,556.00	5,208.83		1,315.72			\$ 10,080.55	3.26%
Construction Engineering	2011	91,368.00	133,835.85		33,806.16			\$ 259,010.01	83.65%
Post Construction	268	11,599.00	16,990.22		4,291.63			\$ 32,880.85	10.62%
			- 1						
TOTALS	2421	108,978.00	159,630.97	720.00	40,321.86	0.00	\$ 00.0	\$ 309,650.83	100.00%
	Calcula	ted Profit % Usin	ng Cost Plus F	ated Profit % Using Cost Plus Fixed Fee (CPFF)	13.05%				
		Equivalen	t Direct Labor	Equivalent Direct Labor Multiplier (DLM)	2.8348	'TEG pro	poses re	2.8348 *TEG proposes reduced multiplier of 2.83 DLM	of 2.83 DLM
			Proposed Fee	Proposed Fee Using 2.83 DLM \$ 309,127.74	\$ 309,127.74				
		4	ctual Profit %	Actual Profit % Using 2.83 DLM	12.87%				



COMPANY NAME: Thomas Engineering Group

PTB NUMBER: Roosevelt Road Watermain Lining - Phase 2 (East)

TODAY'S DATE: 8/31/2016

ПЕМ	ALLOWABLE	UTILIZE W.D. ONLY	QUANTITY J.S. ONLY	CONTRACT RATE	TOTAL
Per Diem (per GOVERNOR'S TRAVEL CONTROL	Up to state rate maximum			\$0.00	\$0,00
BOARD) Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			\$0.00	\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice,			\$0.00	\$0,00
Vehicle Mileage (per GOVERNOR'S TRAVEL	with prior IDOT approval  Up to state rate maximum			\$0.00	\$0.00
CONTROL BOARD) Vehicle Owned or Leased				\$0,00	
Vehicle Rental	\$32.50/haif day (4 hours or less) or \$65/full day				\$0.00
Tolks	Actual cost (Up to \$55/day) Actual cost			\$0.00	\$0.00 \$0.00
Parking	Actual cost				
Overtime	Premium portion (Submit supporting documentation)	in the second		\$0.00	\$0.00
Shift Differential					\$0,00
	Actual cost (Based on firm's policy)			\$0.00	\$0,00
Overnight Deliverships/fourier Service	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			\$0.00	\$0,00
Project Specific Insurance	Actual cost			\$0.00	\$0.00
Monuments (Permanent)	Actual cost			\$0,00	\$0.00
Photo Processing	Actual cost			\$0.00	\$0.00
2-Way Radio (Survey or Phase III Only)	Actual cost			\$0.00	\$0,00
Telephone Usage (Traffic System Monitoring Only)	Actual cost			\$0.00	\$0.00
CADD	Actual cost (Max \$15/hour)			\$0.00	\$0.00
Web Site	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Advertisements	Actual cost (Submit supporting documentation)			\$0,00	\$0.00
Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)		90	\$8.00	\$720.00
Recording Fees	Actual cost			\$0.00	\$0.00
Transcriptions (specific to project)	Actual cost			\$0.00	\$0.00
Courthouse Fees	Actual cost	4		\$0.00	\$0.00
Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)	1		\$0.00	\$0.00
Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Testing of Soil Samples*	Actual cost			\$0,00	\$0.00
Lab Services*	Actual cost (Provide breakdown of each cost)			\$0.00	\$0.00
Equipment and/or Specialized Equipment Rental*	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0,00	\$0.00
				\$0.00	\$0,00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0,00

\*If other allowable costs are needed and not listed, please add in the above spaces provided.

LEGEND

W.O. = Work Order

J.S. = Job Specific

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