

InterOffice Memo

To:

William T. Lichter, Village Manager

From:

David A. Dratnol, P.E., Village Engineer

Date: Subject:

May 4, 2004

SA 219 (Ahrens & School)

Engineering Services Agreement

Design services were solicited via the Engineering Division short list Request for Proposal (RFP) process. SA 219 was the target project in the short list process. Fourteen design firms submitted proposals. The firm receiving the highest overall rating from the five-person evaluation committee was Civiltech Engineering of Itasca. The total contract amount is a not to exceed fee of \$102,974.

The proposed work is officially known as "SA219 Underground Utilities (sanitary and water)

SA 219 involves the improvement of project area listed below

Street	From	То	Length
Ahrens Avenue	Norton Street	Roosevelt Road	1,450
School Street	Norton Street	Roosevelt Road	1,450
Total			Ft.

The project scope includes:

- 1) Site survey and confirmation of existing conditions.
- 2) Coordination with utilities and the Village Attorney.
- 3) Preparation of a preliminary design report that will include the sanitary sewer system, water distribution system and preliminary roadway profile. Final engineering will not proceed until the preliminary report is approved. This will allow the Village to review the project cost for the entire area and program the approved scope of improvements.
- 4) Preparation of construction documents.
- 5) Preparation of IEPA permits as necessary for water and sewer improvements.

This item was presented to the Board of Local Improvements on May 13, 2004 and recommended for approval. Please place this item on the Board of Trustees agenda for the meeting scheduled on May 20, 2004 and request for approval of the contract. If approved by the Board of Trustees please return all paperwork to Public Works - Engineering for further processing.

CC: File ST 05-05



Transportation - Civil - Construction - Environmental - Structural - Planning - Surveying - Land Acquisition - Landscape Architecture

April 28, 2004

Mr. David A. Dratnol, P.E. Village Engineer Village of Lombard 1051 S. Hammerschmidt Avenue Lombard, Illinois 60148-3926

Re: Special Assessment 219

Underground Utilities (Sanitary and Water)

Mr. Dratnol:

This letter is our understanding of the items discussed at our meeting on Tuesday, April 20th regarding the Village's Special Assessment 219 Improvement Project. The following list is a bullet point summary of our discussion:

- Project team will be as listed in our proposal.
- Edgewood Drive was pulled from SA 218. P, S & E was prepared by Engineering Resource Associates (ERA). Civiltech will incorporate this work into the SA 219 documents and review ERA's work from an integration standpoint. This review will not be of the design itself and ERA will sign and seal their part of the contract plans. The quantities will be segregated on the Summary of Quantities plan sheet.

The above is contingent on Village Board approval of adding Edgewood Drive to the SA 219 documents. An additional 28 manhours have been added to the contract for this item, which have been broken out separately as Item 5 under Design Engineering Services in case the work is not required.

Civiltech was directed to contact the County Health Department to ascertain what
record information is available regarding the existing wells and septic fields. We will
also arrange a meeting with the Health Department early on to discuss what
requirements must be met as part of the project.

Subsequent to our meeting, Civiltech contacted the DuPage County Health Department and was put in contact with Mr. Tom Stolt in the Lombard Public Health Center. Mr. Stolt indicated that we will need to Submit a Request for Public Records form requesting permits and drawings related to the wells and septic fields for the parcels in question. We should provide the P.I.N. for the same parcels in our request. Mr. Stolt indicated that the cost for the information will be \$1.00 per sheet. The same request for information must also be made with the Building Department, currently the Department of Development

Mr. David A. Dratnol, Village Engineer Letter of Understanding SA 219 Underground Utilities (Sewer and Water) April 28, 2004 Page - 2

> and Environmental Concerns (DEC) since they have all records before 1990. The cost for the request was not available when we contacted the DEC, however we were told that the cost is minimal.

Both Departments faxed over a blank Request for Public Records Form to be completed and returned by Civiltech. We have included an estimated direct cost in the contract for this information of \$200, and it will only be billed to the Village if required.

- Civiltech will prepare an 8.5" X 11" sketch of the data collected for each house's well and septic field. The sketch will locate the structure, show the existing service line locations and the proposed routing of the new connections. This information will be provided to the home owners by the Village near the time of the Public Meeting. No additional man hours have been added to the contract for this item of work.
- Surveyors will notify the Public Works secretary when they will be working in the field.
 Surveyors shall knock on doors and attempt to notify residents of their work prior to entering private property.
- Future roadway profiles shall also be considered when designing the proposed utility improvements. All assumptions will be documented for review by future designers.
- Mr. Dratnol indicated that Civiltech's manhours were higher than average when compared to the other proposals. Based on further review, we have reduced the original Preliminary Engineering manhours by 32 and the Design Engineering manhours by 30 hours.

The foregoing outlines the specific points raised at our meeting on the referenced project and we understand that this letter will become a part of the engineering contract for this project. The revised "not-to-exceed" fee incorporating the above changes is \$102,974.

We look forward to working with you on this project and its successful completion.

Very truly yours,

CIVILTECH ENGINEERING, INC.

MANHOUR CALCULATION

DESIGN ENGINEERING FOR SA 219 UNDERGROUND UTILITIES (SANITARY AND WATER) CIVILTECH ENGINEERING, INC.

VILLAGE OF LOMBARD

April 28, 2004

PRELIMINARY ENGINEERING PHASE

1. Initial M	eeting with Village (2 people X 3 hours)	6 hours
2. Itemized	l Project Scope and Task List	4 hours
3. Early Co	ordination and Data Collection	
•	Obtain and Review Record Information	16 hours
•	Initial Utility Company Request for Information	2 hours
		18 hours
4. Field Sur	vey and Preparation of Base Sheets	
•	Establish Horizontal and Vertical Control	12 hours
•	Topographic Survey and Cross Sections	224 hours
•	Utility Structure Inventory	16 hours
•	Private Sanitary Sewer Service Coordination,	
	Documentation & Investigation	48 hours
•	Base Sheet Development	45 hours
•	Field Verification of Design Survey	12 hours
		357 hours
5. Existing	Right of Way Verification	
•	Confirmation of Existing ROW	6 hours
•	Prepare Plats of Easement (if required)	8 hours
		14 hours
	Criteria & Preliminary Design Studies	4.4
•	Preliminary Engineering	60 hours
•	Draft Project Report	16 hours
•	Preliminary Quantity Calculations	12 hours
•	Estimate of Cost	2 hours
•	Preliminary Estimate of Time	2 hours
•	Draft PDR Review Meeting with Village Staff	<u>6 hours</u>
1		98 hours
	Project Development Report	
•	Finalize Project Development Report	12 hours
•	Attend Village Board Meeting	
	(2 people X 4 hours) if required	8 hours
		20 hours

TOTAL MANHOURS - PRELIMINARY ENGINEERING PHASE:

517 HOURS

DESIGN ENGINEERING PHASE

1. Pre-Final (65% & 95%) Contract Plans, Special Provisions/Proposal Booklet and Estimates

 Pre-Final Contract Plans Title Sheet & Index of Sheets (1 sheet) Summary of Quantities (1 sheet) General Notes and State / Village Standards List (1 sheet) Existing and Proposed Typical Sections (1 sheet) Alignment, Ties & Benchmarks (1 sheet), 1"=100' Plan and Profile Sheets - includes utilities (8 sheets), 1"=20' Landscaping and Erosion Control (4 sheets), 1"=50' Cross Sections (5 sheets), 1"=10' H; 1"=5' V Roadway and Utility Construction Details (2 sheets) 	2 hours 4 hours 6 hours 12 hours 24 hours 320 hours 30 hours hours 60 hours 8 hours 468 hours
Pre-Final Special Provisions & Bid Booklet	16 hours
IEPA Sewer and Water Permit Applications	8 hours
Pre-Final Quantity Calculations & Estimate of Cost	40 hours
Total Manhours (Design Engineering Phase, Item 1):	532 hours
2. Submittals and Coordination:	
Meetings with Village Staff:	
65%, 95% and 100% Review Meetings (3 meetings X 2 people X 2 hour/meeting)	12 hours
 65%, 95% and 100% Review Meetings 	12 hours
 65%, 95% and 100% Review Meetings (3 meetings X 2 people X 2 hour/meeting) Project Submittals 	
 65%, 95% and 100% Review Meetings (3 meetings X 2 people X 2 hour/meeting) Project Submittals 3 submittals X 4 hours / submittal Coordination: 	12 hours
 65%, 95% and 100% Review Meetings (3 meetings X 2 people X 2 hour/meeting) Project Submittals 3 submittals X 4 hours / submittal Coordination: Miscellaneous Village Staff & Health Dept. Coordination Utility Company Coordination: Pre-Final Plan Submittal, Coordination & Conflict Assessment: 	12 hours 8 hours 4 hours

3. Final (100%) Contract Plans, Special Provisions/Proposal Booklet and Estimates

Contract Plans:

Assume that the Pre-Final Contract Plans are 85% complete:

0.85X = 468 hours *from above*

X = 550; 550 hours - 468 hours =

82 hours

Pre-Final Special Provisions & Bid Booklet

8 hours

Pre-Final Quantity Calculations & Estimate of Cost

24 hours

Total Manhours (Design Engineering Phase, Item 3):

114 hours

4. Public Hearing

• Exhibit and Presentation Preparation

24 hours

• Attend Public Hearing (2 people X 3 hours)

6 hours

Total Manhours (Design Engineering Phase, Item 4):

30 hours

5. Incorporation of Final SA 218, Edgewood P, S & E into SA 219 Documents

Obtain and Review Final P, S & E from ERA

8 hours

• Incorporation of P, S & E into SA 219 Documents

16 hours

Coordination with ERA

4 hours

Manhours (Design Engineering Phase, Item 5):

28 hours

TOTAL MANHOURS - DESIGN ENGINEERING PHASE:

746 hours

TOTAL PROJECT MANHOURS = 517 HOURS + 746 HOURS = 1,263 HOURS

Cost Estimate of Consulting Services
Design Engineering for
SA 219 UNDERGROUND UTILITIES (SANITARY AND WATER)

				Personn	Personnel & Hours						
	Principal in	Project	Project	Design	QC/QA	CAD	Chief of	ľ	Total	% of	Total Cost
	Charge	Manager	Engineer	Engineer	Principal	Technician	Survey	Surveyor	Hours	Hours	
	\$ 60.00	\$ 36.50	\$ 27.00	\$ 25.00	\$ 60.00	\$ 24.50	30.00	24 00			
PRELIMINARY ENGINEERING PHASE						l					
Initial Meeting with Village	3	m							ď	0 50	0000
Itemized Project Scope and Task List		3							7	0.378	00'687
Early Coordination and Data Collection	2		9	4					7 9	4 48/	169,50
Field Survey and Preparation of Base Sheets		40	16	Œ.		AE	130	420	000	0/4/0	
Right-of-Way Verification	,		_			2	2	120	JCC .	20.370	9,564.50
Dosion Catorio and Budinings, Design	1		7 3						14	1.1%	\$ 520,00
Casign Cineria and Fremminaly Design Studies	71		30	24	89				86	7.8%	\$ 3.486.00
Finalize Project Development Report	2	10	80						20	1.6%	5 701 00
											20:10:
DESIGN ENGINEERING PHASE											
Pre-Final P, S & E	20	48	192	160	16	96			630	A2 40/	45 45 00
Submittals & Coordination	4	16	00	CC.		y			700	42.170	15,446.00
Final P. S.& E	12		32	4	٥	Q Q			74	3.3%	
Public Hearing	!!"		3 0	2		2 3			114	80.6	5 3,951.00
the contract of the contract o	1		7			20			30	2.4%	\$ 906.50
IRCOIDOGADO OI SAZIB, EDGEWOOD P, S & E		12	80		_	8			28	2.2%	\$ 850.00
Subtotal			306	218	32	191	130	120	1263	100.0%	
% of Hours	4.8%		24.2%	17.3%	2.5%	15.1%	10.3%	9.5%	100.0%		
I otal Cost	\$ 3,660.00	\$ 7,482.50	\$ 8,262.00	\$ 5,450.00	\$ 1,920,00	\$ 4,679.50	\$ 3,900.00	\$ 2,520.00			\$ 37 R74 NO
Multiplier	2.65										ľ
Direct Costs (See attached calculation)											
Total Cost											

Direct Cost Estimate Design Engineering for SA 219 UNDERGROUND UTILITIES (SANITARY AND WATER)

Vehicle Expense		
Field Survey (14 days at \$36/day)	\$	504.00
Vehicle Mileage	\$	100.00
Total Vehicle Expense	e: \$	604.00
Printing Expense		
Village Plan Submittals (65%, 95% & 100%)		
24 sheets X 3 submittals X 5 sets/submittal X \$0.60/sheet	\$	216.00
IEPA Permit Submittal (plans only)		
Division of Water Pollution Control		
24 sheets X 2 sets X \$0.60/sheet	\$	28.80
Division of Public Water Supplies	•	
24 sheets X 2 sets X \$0.60/sheet	\$	28.80
Utility Company Submittals (65% and 100%)		
24 sheets X 2 submittals X 6 sets/submittal X \$0.60/sheet	\$	172.80
Village Bid Book Submittals (65%, 95% & 100%)		
150 sheets X 3 submittals X 5 sets/submittal X \$0.10/sheet	\$	225.00
Bidding Documents		
Plans - 24 sheets X 30 sets X \$0.60/sheet	\$	432.00
Bid Book - 150 sheets X 30 sets X \$0.10/sheet	\$	450.00
Total Printing Expense	: \$	1,553.40
Shipping Expense	\$	250.00
Dullana County Wall and O. d. S.		
DuPage County Well and Septic Record Information Cost	\$	200.00
TOTAL DIRECT EXPENSES		2 607 40
TOTAL DIRECT EXPENSES	. 4	4,007.40