COPY

VILLAGE OF LA GRANGE, ILLINOIS
WATER SYSTEM IMPROVEMENTS
EAST AVENUE PUMPING STATION REHABILITATION

TASK ORDER NO.17

In accordance with Section 1.2 of the Master Contract dated April 25, 2011 between the Village of La Grange (the "Village") and Baxter & Woodman, Inc. (the "Consultant"), the Parties agree to the following Task Number 17:

1. **Contracted Services:**
   Baxter & Woodman, Inc. shall provide the Village with detailed engineering and design services as described in the Project Description (Exhibit A) and Scope of Services (Exhibit B), attached hereto. All terms and conditions of the master task order contract dated April 25, 2011 with the Village of La Grange shall apply.

2. **Project Schedule:**
   All services shall be completed prior to December 31, 2013.

Investigative & Report Services	8 weeks
Design Services	12 weeks
Permit Acquisition	8 weeks[1]
Bidding Assistance	6 weeks
Total Project Duration	34 weeks

[1] IEPA can legally take up to 12 weeks for review, 8 weeks is based upon current experience.

3. **Project Completion Date:**
   All Contracted Services must be completed on or before December 31, 2013.

4. **Project Specific Pricing** (if applicable):
   Baxter & Woodman, Inc. shall be compensated on a cost plus fixed fee basis in an amount not to exceed $125,776. This fee includes an estimated $30,750 in subconsultant fees for the structural inspection of the ground storage tank and vertical turbine pump inspection.

5. **Additional Changes to the Master Contract** (if applicable):
   N/A

All other terms and conditions remain unchanged.

[signature page follows]

VILLAGE	CONSULTANT
Signature	Signature
	Louis D. Haussmann, PE, PTOE
Director of Public Works	Name (Printed or Typed)
	December 4, 2012
Date	Date

If greater than, $2,000, the Village Manager's signature is required.

Signature

Village Manager

Date

If greater than $10,000, the Village Board must approve the Task Order in advance and the Village President's signature is required.

Signature

Elizabeth M. Asperger, Village President

Village President

December 10, 2012

Date

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EXHIBIT A

PROJECT DESCRIPTION

Tasks include an investigation and report into recommendations contained in the East Avenue Pumping Station Evaluation study from January 2011. Additional tasks include preparing drawing and specifications to accomplish specific design tasks recommended in the 2011 evaluation needed to rehabilitate the facility. Design tasks to be performed as part of this Project include following:

A. Investigation and Reports

1. Investigate existing East Avenue Pumping Station inlet and outlet meters to determine if the existing turbine type meters should be replace.
2. Investigate replacement of existing roof at the East Avenue Pumping Station including asbestos testing.
3. Review Tilden Water Tank valve vault and make recommendations for insulating and heating vault.
4. Review operating parameters for the Birks Ct. Standpipe Pumping Station and make recommendations for upgrades and/or changes.
5. Update Emergency Response Plan and Vulnerability Study.
6. Investigate feasibility of McCook bypass
7. Conduct structural inspection of ground storage tank including exterior and interior of tank.
8. Arrange for inspection of vertical turbine pumps.
9. Review existing SCADA system and prepare preliminary design for modernization of the system including communications, security, video surveillance, instrumentation, and reporting for the pump station.
10. Prepare and submit Public Sector Energy Efficiency Grant to the Illinois Department of Commerce and Economic Opportunity

B. Electrical Design Tasks

1. Replace existing building interior lighting fixtures with high efficiency fixtures and lamps
2. Design a new generator with self-contained fuel storage tank and integral weatherproof, sound attenuating enclosure. Provide structural design of a concrete support pad for the generator.
3. Design new automatic transfer switch to coordinate with new outdoor diesel generator.
4. Replace existing motor control center including technological upgrades to coordinate with upgrade of SCADA system.

5. Technology SCADA design services based upon system selected by the Village from the preliminary design.

C. Mechanical Design Tasks:

1. New dehumidification system for the main East Avenue Pumping Station.
2. Conversion from gas chlorine disinfection to sodium hypochlorite disinfection including new injection sites at the discharge of each of the three main East Avenue vertical turbine pumps.
3. New Booster Pump Surge Control Valves on each of the three vertical turbine pumps including changes to SCADA system.
4. Installation of a new isolation valve on East Avenue utilizing site drawing and surveys previously prepared for other projects.
5. Coordinate removal of vertical turbine high service pumps and inspection for wear on pumps. Recommend repairs of pumps or replacement.
6. Coordinate video recording inspection of the pump suction tube and provide recommendations for repairs.
7. Design and coordinate replacement of existing building roof including removal of existing roofing material (may include asbestos remediation) and existing generator cooling system, increasing insulation to meet current codes and raising existing skylights and exhaust fans to accommodate additional insulation.

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EXHIBIT B

SCOPE OF SERVICES

I. PROJECT MANAGEMENT AND ADMINISTRATION

A. Plan, schedule, and control the activities that must be performed to complete the Project. These activities include

1. Budget control and invoicing
2. Schedule control
3. Coordinating activities of engineering and production staff
4. Reviews for the purpose of quality control, quality assurance, and permitting
5. Project scope control

B. Meet with the Village staff

1. Initial Project kick-off meeting
2. Intermediate design meeting
3. Final design meeting

C. Confer with the Village staff via email on a regular basis (no less than bi-weekly), to clarify Project status, to discuss Project progress, and to solicit owner input on design decisions.

II. INVESTIGATION AND REPORT SERVICES – Prepare a report outlining the results of investigations conducted on specific items outlined in the January 2011 East Avenue Pumping Station Report including the following:

A. Investigate East Avenue Pumping Station inlet and outlet meters to determine if existing turbine meters should be replaced.

B. Investigate replacement of the existing pumping station roof including meeting current codes and asbestos testing.

C. Review Tilden Water Tank valve vault and make recommendations for insulating and heating vault.

D. Review operating parameter for the Birks Ct. Standpipe Pumping Station and make recommendations for upgrades and/or changes.

E. Update the existing Emergency Response Plan and Vulnerability Study

F. Investigate the feasibility of utilizing the McCook water supply to feed the Village directly during an emergency.

G. Arrange for a structural inspection of the existing ground storage tank including exterior, floating interior, and diver inspected bottom and sides below the water line, and prepare a summary report of the findings. Cost for structural inspection by the outside consultant Natgun included in engineering fee.

H. Arrange for removal and inspection of the three vertical turbine pumps.

I. Review existing SCADA system and prepare a summary of recommendations for modernization of the system including communications, security, video surveillance, instrumentation, and reporting.

J. Prepare and submit Public Sector Energy Efficiency Grant to the Illinois Department of Commerce and Economic Opportunity.

III. DESIGN SERVICES - Prepare Design Documents for the rehabilitation work to be performed at the East Avenue Pumping Station consisting of Drawings showing the extent and character of construction work to be furnished and performed by the Contractor(s) selected by the Village and Specifications which will be prepared in conformance with the format of the Construction Specification Institute for the following items of work as outlined in the January 2011 East Avenue Pumping Station Evaluation report:

A. Electrical Design

1. Replace existing building interior lighting fixtures with T-8 type fixtures with electronic ballasts.
2. Replace the existing generator with a new generator to be housed in a weatherproof, sound attenuating enclosure with integral diesel fuel storage tank mounted on a concrete pad.
3. Design new automatic transfer switch including connection of all power and control wiring to the new ATS.
4. Replace existing motor control center including new motor starters, circuit breakers, surge protection, lighting panel, transformer and connection of all power and control wiring.
5. Design new SCADA system communications infrastructure and power for access control, security, (optional) video surveillance, instrumentation, control system and reporting architecture and design based upon the information provided to the Village from the report outlined above.

B. Mechanical Design:

1. New Dehumidification system for the Main East Avenue Pumping Station in order to reduce maintenance costs due to corrosion associated with condensation on equipment.
2. Conversion from gas chlorine disinfection to sodium hypochlorite disinfection to eliminate risk of accidental release of chlorine gas into the neighborhoods around the pumping station.
3. New Booster Pump Surge Control Valves – Remove existing valves and replace with new valve combination with same operation to reduce electrical costs.
4. Installation of a new isolation valve on East Avenue utilizing site drawing and surveys previously prepared for other projects to facilitate isolation of the existing pumping station and operation of the Auxiliary Pumping Station.
5. Coordinate removal of vertical turbine high service pumps and inspection for wear on pumps. Recommend repairs of pumps or replacement.
6. Design and coordinate replacement of the existing building roof including removal of existing roofing material (may include asbestos remediation), existing generator cooling system, increasing roof insulation to meet current codes, raising the height of the existing skylights and exhaust fans to accommodate additional insulation.

C. Structural Design:

1. Concrete pad for new generator.
2. Review recommendations from structural inspection of reservoir.
3. New roof including review of building code, revise insulation thickness to meet current building code, possible curb installation for raised skylights.

IV. PUBLIC SECTOR ENERGY EFFICIENCY GRANT – Prepare and submit a Public Sector Energy Efficiency Grant to the Illinois Department of Commerce and Economic Opportunity to partially fund the construction of eligible project elements. A Custom Incentive Program Worksheet and supporting documents will be prepared to complete the application.

V. PERMIT ACQUISITION - Submit the Design Documents to the IEPA for their review and approval for the Village to construct and operate the Project. Furnish the Village with three (3) sets of the Design Documents approved by IEPA.

VI. BIDDING ASSISTANCE

A. Prepare an opinion of probable construction cost based on the Design Documents approved by IEPA.

B. Prepare for review and approval by the Village and its legal counsel the forms of Construction Contract Documents consisting of Advertisement for Bids, Bidder Instructions. Bid Form, Agreement, Performance Bond Form, Payment Bond Form, General Conditions, and Supplementary Conditions, where appropriate, based upon documents prepared by the Engineers Joint Contract Document Committee (EJCDC).

C. Assist the Village in solicitation of construction bids from as many qualified bidders as possible, attend the bid opening and tabulate bid proposals, make an analysis of the bids, and submit recommendations for the award of construction contract.

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EXHIBIT C

PRELIMINARY ENGINEERING

Route:
Local Agency: Village of La Grange
(Municipality/Township/County)

Section:
Project:
Job No.: 120274.40

*Firm's approved rates on file with IDOT's Bureau of Accounting and Auditing:	
Overhead Rate (OH)	147%
Complexity Factor (R)	0
Calendar Days	160

Method of Compensation:

Cost Plus Fixed Fee 1	X	14.5%[DL + R(DL) + OH(DL) + IHDC]
Cost Plus Fixed Fee 2	☐	14.5%[DL + R(DL) + 1.4(DL) + IHDC]
Cost Plus Fixed Fee 3	☐	14.5%[(2.8 + R)DL] + IHDC
Direct Labor Multiple	☐	
Specific Rate	☐	
Lump Sum	☐	

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by Others	In-House Direct Costs (IHDC)	Profit	Total
Project Management & Administration	Sr. Engineer III	24	$45.53	$1,093	$1,607		$57	$400	$3,157
	Sr. Engineer II	75	$43.06	$3,230	$4,748			$1,157	$9,135
	Engineer II	10	$35.60	$356	$523			$128	$1,007
Investigation and Report Services	Sr. Engineer II	65	$45.53	$2,959	$4,350	$30,750	$57	$1,068	$39,184
	Sr. Engineer I	60	$40.29	$2,417	$3,553		$57	$874	$6,901
	Engr Tech III	35	$50.80	$1,778	$2,614			$637	$5,029
	Clerical I	24	$24.16	$580	$853			$208	$1,641
Design Services	Sr. Engineer II	140	$45.53	$6,374	$9,370		$57	$2,291	$18,092
	Engineer III	130	$53.22	$6,919	$10,171			$2,478	$19,568
	Engr Tech III	20	$39.23	$785	$1,154			$281	$2,220
	CAD/GIS Tech III	100	$37.50	$3,750	$5,513			$1,343	$10,606
	Clerical I	30	$24.16	$725	$1,066			$260	$2,051
Public Sector Energy Efficiency Grant	Engineer III	12	$35.60	$427	$628			$153	$1,208
Permit Acquisition	Sr. Engineer II	10	$45.53	$455	$669			$163	$1,287
Bidding Assistance	Sr. Engineer II	24	$45.53	$1,093	$1,607		$57	$400	$3,157
	CAD/GIS Tech III	8	$37.50	$300	$441			$107	$848
	Clerical I	10	$24.16	$242	$356			$87	$685
TOTALS		777		$ 33,483	$ 49,223	$ 30,750	$ 285	$ 12,035	$ 125,776

In-House Direct Costs:
VEHICLE EXPENSES - TRAVEL 504 MILES @ $0.565/MILE = $285

Services by Others:

Roof Asbestos testing	$1,000
Pull and inspect 3 VT pumps	$24,000
Structural Inspection of Reservoir (Exterior and Interior Dive Inspection)	$5,750