

RESOLUTION 13-02

APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH CLARK DIETZ IN CONNECTION WITH DESIGN AND BIDDING DOCUMENTS FOR THE IMPROVEMENTS OF THE SECONDARY CLARIFIER

WHEREAS the Village of Manteno, a Municipal Corporation, maintains sanitary sewer system with an aeration system; and

WHEREAS the Village of Manteno acting by and through its Village President and Board of Trustees find it in the public interest that a certified professional be contracted to prepare the project work plan and bidding documents for the improvements of the secondary clarifier at the Water Pollution Control Center; and

WHEREAS it is necessary to contract with a professional company with certified personnel skilled in preparing the project work plan and bidding documents for the improvements of the secondary clarifier at the Water Pollution Control Center; and

WHEREAS Clark Dietz, Champaign, IL, is a company with professional and certified personnel skilled in preparing the project work plan and bidding documents for the improvements of the secondary clarifier at the Water Pollution Control Center.

NOW THEREFORE BE IT RESOLVED by the President and Board of Trustees of the Village of Manteno, Kankakee County, Illinois as follows:

SECTION 1: That an agreement for Professional Services with Clark Dietz, Champaign, IL, in connection with preparing the project work plan and bidding documents for the improvements of the secondary clarifier at the Water Pollution Control Center and the same is hereby approved.

SECTION 2: That the Village President is hereby authorized, empowered and directed to execute said agreement for Professional Services provided for in Section One of this resolution in the form and content of **Exhibit "A"** which is attached hereto and made a part hereof.

Passed by the Board of Trustees of the Village of Manteno, Kankakee County, Illinois at a regular meeting thereof held on 3rd day of June, 2013 and approved by me as Village President on the same day.

RECORD OF THE VOTE	Yes	No	Abstain	Absent
President Timothy Nugent				
Trustee Timothy Boyce				X
Trustee Samuel Martin	X			
Trustee Diane Dole	X			
Trustee Todd Crockett	X			
Trustee Joel Gesky	X			
Trustee Wendell Phillips	X			
TOTAL VOTES <i>or</i>				
BY OMNIBUS VOTE	X			


 Timothy O. Nugent, Village President

ATTEST:


 Alisa Blanchette, Village Clerk *Deputy*



Project Work Plan

Secondary Clarifier Improvements Design and Bidding

Village of Manteno

Clark Dietz Project No.
M0060097

January 28, 2013

Submitted by

Clark Dietz
125 W. Church Street
Champaign, IL 61820
Phone: 217.373.8900

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1.0 SCOPE OF SERVICES / PRODUCTION METHODOLOGY

This Project Work Plan has been prepared to organize the work flow to complete the Secondary Clarifier Equipment Replacement at the Village of Manteno's Water Pollution Control Center (WPCC). The design effort will consist of a review of the existing secondary clarification system and related infrastructure with the goal of providing the most appropriate equipment replacement configuration. This design effort will include a review of the existing clarifier loading data, development of a preliminary design report to summarize the proposed equipment and required configuration, development of the construction documents for bidding purposes, and bidding phase services to obtain bids from construction contractors.

The scope of services and production methodology for this project is summarized as follows:

1. Project Administration

- 1.1. Develop a written project work plan that addresses work tasks, milestones, schedules, deliverables, roles/responsibilities and similar project implementation and communication details.
- 1.2. Conduct a project kickoff meeting with the Village to finalize the project objectives and to review and discuss work tasks, deliverables, milestones, schedules, and similar project details. Meet with operations personnel to determine their preferences and make a site visit to the treatment plant to review the secondary clarifier system configuration. Discuss clarifier options.
- 1.3. Prepare monthly project status reports in a format approved by the Village.
- 1.4. Project Management

2. Field Data Collection

- 2.1. Obtain current drawings and basis of design reports for the treatment plant process design.
- 2.2. Obtain current electrical drawings and one line diagram for entire plant.
- 2.3. Obtain the current NPDES permit.
- 2.4. Obtain the last 3 years of plant operating data. This data will need to include historical data for the aeration tank mixed liquor levels, flows and loadings to the secondary clarifiers, daily average and peak flows, hourly diurnal flows, as well as effluent discharge concentrations.
- 2.5. Complete field surveys to provide additional topography and surface features, locate above and below ground utilities.
- 2.6. Reduce field survey information and produce existing condition drawings in client requested format.

- 2.7 Prepare preliminary CADD plan and section drawings from the information obtained during the field investigation for use in the preliminary design evaluation and final design.

3. Preliminary Design (50%)

- 3.1. Tabulate and graph historical loading data.
- 3.2. Develop current secondary clarifier system design criteria.
- 3.3. Obtain secondary clarifier equipment information, recommended design, and preliminary cost information from the equipment vendors for the design criteria.
- 3.4. Develop preliminary secondary clarifier equipment layout drawings.
- 3.5. Develop preliminary electrical power drawings.
- 3.6. Develop preliminary one line electrical drawings.
- 3.7. Prepare a preliminary opinion of probable project cost.
- 3.8. Prepare and submit to Village up to three (3) copies of a Preliminary Design Report documenting the secondary clarification system design criteria, secondary clarifier replacement alternatives, scum pumping alternatives, electrical design requirements, and a preliminary opinion of probable costs. The report will include preliminary drawings showing the recommended alternative.
- 3.9. Meet with the Village to discuss the Preliminary Design Report.
- 3.10. Prepare IEPA construction permit applications for submittal by the Village.
- 3.11. Perform QA/QC review of preliminary design.

4. Final Design (90%)

- 4.1 Conduct additional field investigation to obtain final information for the development of drawings and specifications.
- 4.2 Finalize design computations to establish the type, size and location of the clarifier equipment and the new scum pump station.
- 4.3 Develop final equipment control requirements.
- 4.4 Develop suggested construction sequencing for installation of new facilities.
- 4.5 Prepare 90% construction contract documents for review by the Village.

These documents will generally include:

Construction Drawings

- Cover Drawing
- General Notes, Index, Legend, Benchmarks
- Site Plans
- Secondary Clarifier Demolition Drawings
- Secondary Clarifier Equipment Plan and Section Drawings
- Electrical One Line Diagrams
- Electrical Plans and Details

- Miscellaneous Detail Drawings

Construction Specifications

- Notice to Bidders
- Bid Proposal
- Certification
- Bid Bond
- Performance and Payment Bond
- Instructions to Bidders
- General Conditions
- Supplementary Conditions
- Technical Specifications

- 4.6 Prepare opinion of probable construction cost.
- 4.7 Prepare and submit up to three (3) sets of plans, specifications, and the project cost estimate (90% submittal) to Village and meet with the Village to discuss and receive their final review comments.
- 4.8 Perform a plan in hand walk through with the proposed 90% construction drawings.
- 4.9 Prepare and submit final construction documents in hard copy (3 sets) and electronic format to the Village. Documents shall be in Adobe PDF format.
- 4.10 Perform QA/QC review of 90% design documents.

5. Bidding Process

- 5.1 Prepare advertising notice for project and submit to Village for publication.
- 5.2 Issue bidding documents to prospective bidders through Clark Dietz's Quest online bidding services.
- 5.3 Conduct pre-bid meeting and prepare meeting minutes.
- 5.4 Prepare and issue addenda as needed.
- 5.5 Attend bid opening and prepare tabulation of bids.
- 5.6 Review contractor bids and make a recommendation regarding construction contract award.
- 5.7 Prepare contract documents for execution by contractor and Village.

6. Construction Phase

Construction phase services are not included as part of this project fee. An amendment to the agreement will be provided prior to proceeding on to the construction phase of this project. Construction phase services will consist of the following tasks:

- 6.1. Assist Village in conducting a pre-construction conference.
- 6.2. Review shop drawings.
- 6.3. Attend progress / pay meetings and process the associated pay applications.
- 6.4. Answer contractor questions, provide clarifications and issue change orders, as necessary.
- 6.5. Prepare record drawings based on the record drawings maintained by the contractor during construction. Provide copies of field books and survey data.
- 6.6. Review contractor provided O&M Manuals.
- 6.7. Provide periodic site observation services.
- 6.8. Provide project startup testing. Assist in coordinating the contractor provided equipment training.

2.0 DELIVERABLES SUMMARY

- A. ***Preliminary Design Report*** consisting of the following:
 - Preliminary Design for Recommended Project
 - o Written process description
 - o Preliminary Process Flow Diagram
 - o Preliminary Process Calculations and Design Criteria
 - o Preliminary Site Plan
 - o Preliminary Section Views
 - o Preliminary Opinion of Probable Construction Cost

- B. ***90% Construction Drawings and Technical Specifications*** for review by the Village.

- C. ***Final Construction Drawings and Technical Specifications*** for bidding purposes.

- D. Project Administration
 - 1. Project Work Plan
 - 2. Monthly Invoices/Status Reports

3.0 TEAM DIRECTORY

Name	Title/Role	Phone	Email
<i>MANTENO</i>			
Brian O’Keefe	Superintendent of Public Works	(815) 929-4802	bokeefe@villageofmanteno.com
Terry Wilson	Treatment Plant Operator	(815) 468-8089	twilson@villageofmanteno.com
<i>CLARK DIETZ</i>			
Terry Boyer	Project Manager	217.373.8938	Terrence.Boyer@clarkdietz.com
Andrea Bretl	Lead Engineer	217.373.8933	Andrea.Bretl@clarkdietz.com
Jim Edenburn	Lead Technician	217.373.8936	Jim.Edenburn@clarkdietz.com

4.0 WORK TASK BREAKDOWN

The work effort to complete the Secondary Clarifier Improvements as described in this Project Work Plan will be completed under the following project phase IDs:

Description	Phase ID
ADMIN	Project Administration
DATA	Field Data Collection
PRELIM	Preliminary Design
PDR	Preliminary Design Report
PERMIT	Permitting
FINDES	Final Design
BID	Bidding

5.0 SCHEDULE

The anticipated project schedule for the Secondary Clarifier Improvements Project, based on a February 15, 2013 Notice to Proceed from the Village, is as follows:

1. Kickoff Meeting	February 19
2. Preliminary Design (50%)	April 12
3. Village Review of 50% Design	April 17
4. Submit IEPA Permit	April 18
5. Final Design	May 24
6. Village Review of Final Design	May 29
7. Advertise	May 31
8. Open Bids	June 25
9. Recommendation to City	June 27
10. Permit Approval from IEPA	June 15
11. Village Authorization to Award	July 1
12. Pre-Construction Meeting	July 2
13. Notice to Proceed to Contractor	July 2

6.0 QUALITY ASSURANCE PLAN

Clark Dietz strives to conform to the requirements of its clients. As such, careful attention will be given to the internal review of design criteria, operational data analysis, cost estimates, process calculations, documents, reports, executive summaries, drawings, memoranda, and the overall presentation of our deliverables.

Prior to the delivery of materials to the Village, Clark Dietz will conduct an internal review of the deliverables such that conformance to this Project Work Plan is maintained.

Jim Edenburn and Andrea Bretl will develop the project deliverables. Each of these will be reviewed by either Terry Boyer, Randy Vanderwerf or Greg Droessler as a quality control review prior to sending these documents to the Village. Randy has over 26 years experience in water and wastewater engineering and Greg has over 12 years experience in wastewater design and construction.

7.0 ASSUMPTIONS AND EXCLUSIONS

The agreement and project work plan is subject to the following assumptions/conditions:

1. This Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the State of Illinois.
2. This agreement does not include the preparation of right-of-way or temporary construction easement drawings, descriptions or negotiation/acquisition services.
3. This agreement does not include the preparation of assessment roles or schedules.
4. This agreement does not include geotechnical investigations.
5. Local permits for this project (street cuts, utility relocations, etc.) will be obtained by the Client with information provided by Clark Dietz. All permit fees will be paid by the Client.
6. State permits for this project will be obtained by the Client with information provided by Clark Dietz. All permit fees will be paid by the Client.
7. No Federal permits are anticipated for this project.
8. This agreement does not include contaminated site Phase I or Phase II environmental assessment investigations or remediation activities.
9. This agreement does not include cultural, historic, archeological, or wetland assessment investigations or remediation activities.
10. This agreement assumes there will be no major structural design required and that the new secondary clarifier equipment will be able to be installed in the existing secondary clarifiers with no structural modification.
11. It is assumed the all new construction will be performed on Village property and no easements from private land owners will be required.

8.0 FEE ESTIMATE

The estimated fee for performing these services is \$44,280 and will be performed on an hourly basis at our current billing rates. The current billing rate schedule and fee estimate breakdown are attached.

SCHEDULE OF GENERAL BILLING RATES

CLARK DIETZ, INC.

January 1, 2013

<u>TITLE</u>	<u>HOURLY RATE</u>
Engineer 7	170.00
Engineer 6	160.00
Engineer 5	140.00
Engineer 4	125.00
Engineer 3	110.00
Engineer 1 & 2	95.00
Technician 5	120.00
Technician 4	110.00
Technician 3	95.00
Technician 2	75.00
Technician 1	65.00
Clerical	70.00

Notes:

The rates in this schedule will be reviewed and adjusted as necessary but not sooner than six months after the date listed above. Rates include actual salaries or wages paid to employees of Clark Dietz plus payroll taxes, FICA, Worker's Compensation insurance, other customary and mandatory benefits, and overhead and profit. All project related expenses and subconsultants will be billed at 110% of actual cost to cover handling and administrative expenses.

CLARK DIETZ - FEE ESTIMATE
Secondary Clarifier Equipment Replacement
Village of Manteno

WORK TASKS	Project Manager	Engineer	Engr/ Tech	Tech	Clerical	Expenses	Task Total
	P-6	P-4/T-5	P-2/T-3	T-2			
1. Project Administration							\$3,300
1.1. Develop a written project Work Plan	2						\$320
1.2. Conduct project Kickoff Meeting	6	6				\$150	\$1,860
1.3. Monthly project status reports	3						\$480
1.4. Project Management	4						\$640
2. Field Data Collection							\$3,495
2.1. Obtain current drawings and basis of design reports for the treatment plant process design.		1					\$125
2.2. Obtain current electrical drawings and one line diagram for entire plant.		1					\$125
2.3. Obtain the current NPDES permit.		1					\$125
2.4. 2.4. Obtain the last 3 years of plant operating data. This data will need to include historical data for the aeration tank mixed liquor levels, flows and loadings to the secondary clarifiers, daily average and peak flows, hourly diurnal flows, as well as effluent discharge concentrations.		1					\$125
2.5. Complete field survey		1		16		\$150	\$1,475
2.6. Reduce field survey information and produce existing condition drawings				4			\$300
2.7. Prepare preliminary plan and section drawings	2	4		12			\$1,720
3. Preliminary Design (50%)							\$16,730
3.1. Tabulate and graph historical loading data.		2	8				\$1,010
3.2. Develop current secondary clarifier system design criteria.	1	2	4				\$790
3.3. Obtain secondary clarifier equipment information, recommended design, and preliminary cost information from the equipment vendors for the design criteria.		2					\$250
3.4. Develop preliminary secondary clarifier equipment layout drawings.	2	8		24			\$3,120
3.5. Develop preliminary electrical power drawings.		8					\$1,000
3.6. Develop preliminary one line electrical drawings.		8					\$1,000
3.7. Prepare a preliminary opinion of probable project cost.	1	4	8				\$1,420
3.8. Prepare Preliminary Design Report.	4	8	24			\$100	\$4,020
3.9. Meet with Village to discuss the Preliminary Design Report.	6	6				\$150	\$1,860
3.10. Prepare IEPA construction permit application.	1	2	6				\$980
3.11. Perform QA/QC.	8						\$1,280
4. Final Design (90%)							\$15,795
4.1. Final field investigation for the development of drawings and specifications.		8				\$150	\$1,150
4.2. Finalize design computations.	1	2	4				\$790
4.3. Develop final equipment controls.		4					\$500
4.4. Develop suggested construction sequencing for installation of new facilities.	2	4					\$820
4.5. Prepare 90% construction contract documents for review by the Village.	2						\$320
Construction Drawings							
- Cover Drawing		1		1			\$200
- General Notes, Index, Legend, Benchmarks		1		2			\$275
- Site Plans		1		8			\$725
- Secondary Clarifier Demolition Drawings		1		8			\$725
- Secondary Clarifier Equipment Plan and Section Drawings		1		8			\$725
- Electrical One Line Diagrams		1		4			\$425
- Electrical Plans and Details		2		6			\$700
- Miscellaneous Detail Drawings		2		4			\$550
Construction Specifications	2						\$320
- Notice to Bidders		1					\$125
- Bid Proposal		1					\$125
- Certification		1					\$125
- Bid Bond		1					\$125
- Performance and Payment Bond		1					\$125
- Instructions to Bidders		1					\$125
- General Conditions		1					\$125
- Supplementary Conditions		1					\$125
- Technical Specifications		4	8			\$50	\$1,310
4.6. Prepare opinion of probable construction cost.	1	2	4				\$700
4.7. Meet with Village to discuss and receive final review comments.	6	6				\$150	\$1,860
4.8. Perform a plan in hand walk through with the proposed 90% construction drawings.	2	2					\$570
4.9. Prepare and submit final construction documents to the Village.	1	2		4		\$50	\$760
4.10. Perform QA/QC.	8						\$1,280
5. Bidding Process							\$4,460
5.1. Prepare advertising notice for project and submit to Village for publication.		2					\$250
5.2. Issue bidding documents to prospective bidders and maintain document holders list.	1		4			\$50	\$590
5.3. Conduct pre-bid meeting and prepare meeting minutes.	4	2				\$150	\$1,040
5.4. Prepare and issue addenda as needed.	1	2	4			\$50	\$840
5.5. Attend bid opening and prepare tabulation of bids.	4	2				\$150	\$1,040
5.6. Review contractor bids and make a recommendation regarding construction contract award.	1		2				\$350
5.7. Prepare contract documents for execution by contractor and Village.	1		2				\$350
6. Construction Phase							
6.1. Assist Village in conducting a pre-construction conference.							
6.2. Review shop drawings.							
6.3. Attend progress / pay meetings and process the associated pay applications.							
6.4. Answer RFTs, provide clarifications and issue change orders, as necessary.							
6.5. Prepare record drawings.							
6.6. Review contractor provided O&M Manuals.							
6.7. Provide periodic site observation services.							
6.8. Provide project startup testing in conjunction with contractor provided equipment training.							
TOTAL HOURS	77	125	78	101			
RATE/HR	\$160	\$125	\$95	\$75	\$70		
TOTAL COST	\$12,320	\$15,625	\$7,410	\$7,575	\$70	\$1,350	\$44,280

Estimated Construction Cost \$754,000

Design Fee as Percent of Construction 5.9 %