

**VILLAGE OF WINDSOR
VILLAGE BOARD RESOLUTION 2016-33**

**RESOLUTION REGARDING THE ENGAGEMENT OF
PROFESSIONAL ENGINEERING SERVICES FOR ASSISTANCE IN THE
COMPLETION OF THE CAPACITY, MANAGEMENT, OPERATION, AND
MAINTENANCE DOCUMENT FOR UTILITY DISTRICT NO 1**

WHEREAS, owners of wastewater treatment facilities, as well as collection systems, including satellite systems are required by Wisconsin Administrative Code Chapter NR 208 – Compliance Maintenance to electronically submit an annual report by July 31; and

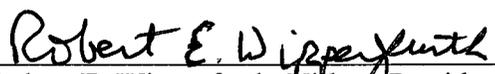
WHEREAS, the Windsor Utility Commission reviewed the Work Order from Baxter & Woodman for assistance to the Village with the development of a Capacity, Management Operation, and Maintenance (CMOM) document for Utility District No. 1 to satisfy the Wisconsin Administrative Code Required; and

WHEREAS, the Windsor Utility Commission recommended the Village Board approve Baxter & Woodman Work Order for Utility District No. 1 CMOM Engineering Services, attached hereto as Exhibit A, on 23rd of February 2016;

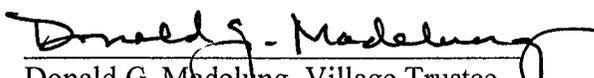
NOW THEREFORE, BE IT RESOLVED, by the Village Board of the Village of Windsor that it hereby approves engagement of Baxter & Woodman to perform such engineering services in accordance with the Work Order attached hereto as Exhibit A.

The above and foregoing resolution was duly adopted by the Village Board of the Village of Windsor, Dane County, Wisconsin at a meeting held on the 3rd day of March 2016 by a vote of 5 in favor and 0 against.

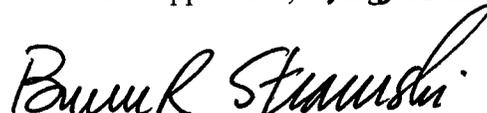
Village of Windsor



Robert E. Wipperfurth, Village President



Donald G. Madelung, Village Trustee



Bruce Stravinski, Village Trustee



Alan Buchner, Village Trustee



Monica M. Smith, Village Trustee

Attest:



Tina Butteris, Deputy Clerk

**VILLAGE OF WINDSOR, WISCONSIN
UTILITY DISTRICT NO. 1
CAPACITY, MANAGEMENT, OPERATION,
AND MAINTENANCE ASSISTANCE (CMOM)
ENGINEERING SERVICES
WORK ORDER**

ENGINEERS' PROJECT NO. 160155.30

Project Description:

The Project includes assistance to the Village with the development of a Capacity, Management, Operation, and Maintenance (CMOM) document to satisfy the Wisconsin Administrative Code requirement. The CMOM needs to be completed by July 31, 2016.

Engineering Services:

Provide engineering services in accordance with the Village Engineering Services Agreement dated December 17, 2015. The scope of services for this Project is listed in Attachment A and Attachment C. Manpower requirements and a fee summary are listed in Attachment B.

Compensation:

Compensation for the services to be provided under this Work Order will be in accordance with the Village Engineering Services Agreement dated December 17, 2015. The Owner shall pay the Engineer for the services performed or furnished under Attachment A, based upon the Engineer's standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel, which in total will not exceed \$10,000.

Submitted by: **Baxter & Woodman, Inc.**

By: Derek J. Wold
Derek J. Wold, P.E.

Title: Vice President

Date: February 8, 2016

Approved: **Village of Windsor, WI**

By: Robert E. Wipperfurth
Robert E. Wipperfurth

Title: Village President

Date: March 3rd 2016

Attest: Tina Butteris
Tina Butteris, Clerk (Deputy)

Additional Comments and Conditions: The fee is determined with the understanding that the required system information is available from the Utility. This work order does not include efforts for development of documents that do not exist. Examples include GIS mapping, organizational charts, emergency response plans, etc. In addition, collection of information from Oak Springs and the Lake Windsor Utilities will be performed by Village Staff.

PROJECT DESCRIPTION

The Wisconsin Administrative Code includes a new requirement that all owners of collection systems develop and implement a Capacity, Management, Operation, and Maintenance (CMOM) Program. The goal of this CMOM Program is to assure adequate sanitary sewer Capacity at all times through proper Management, Operation, and Maintenance, so that there are no sanitary sewer overflows or flooded basements (Proposed SSO Rule, January, 2001). This CMOM Program must be implemented and available for WDNR inspection by August 1, 2016. Baxter & Woodman will assist the Village with developing this program for the Village's Utility District No. 1. The Village will maintain ownership of this working document; it will need to be updated as the sanitary sewer systems expand and age.

SCOPE OF SERVICES

We propose the following scope:

1. REVIEW EXISTING DISTRICT DOCUMENTATION

- Attend up to five (5) meetings with the Village and Utility staff to review the requirements of the CMOM program. Attachment C provides a detailed listing of the WDNR required CMOM Program elements that we will review and document with the Village and Utility. Assist the Village and Utility in collecting and organizing the existing information into a file binder for record keeping. An electronic version of the file binder will also be made.

2. IDENTIFY FUTURE ELEMENT NEEDS

- Develop a prioritized list of items and estimated costs needed to make the existing Village documentation compliant with the CMOM Program. The list will include a suggested responsible party for each item and a schedule for each item to meet the August 1, 2016 deadline. Please note that future elements may require additional expenditures, including legal and engineering services.

Manpower Requirements and Costs Summary

<u>Deliverable</u>	<u>Employee Class</u>	<u>Hourly Rate</u>	<u>Estimated Hours</u>	<u>Labor Cost</u>
Project Management	Senior Engineer IV	\$ 170.00	2	\$ 340.00
	Engineer III	\$ 115.00	6	\$ 690.00
Project Management Totals			8	\$ 1,030.00
Data Collection	Senior Engineer IV	\$ 170.00	4	\$ 680.00
	Engineer III	\$ 115.00	30	\$ 3,450.00
Data Collection Totals			34	\$ 4,130.00
CMOM Creation	Senior Engineer IV	\$ 170.00	6	\$ 1,020.00
	Engineer III	\$ 115.00	34	\$ 3,910.00
CMOM Creation Totals			40	\$ 4,930.00
Total Estimated Construction Engineering Fees			82	\$10,090.00
USE				\$10,000.00

**VILLAGE OF WINDSOR, WISCONSIN
CAPACITY, MANAGEMENT, OPERATION, AND MAINTENANCE CMOM
ATTACHMENT C - Work Order 160155.30
CMOM Checklist**

1. Goals (Mission Statement)
 - a. Properly managed, operated, and maintained at all times
 - b. Provides adequate capacity to convey all peak design flows
 - c. All feasible steps are taken to eliminate excessive infiltration and inflow, cease sanitary sewer overflows, and sewage treatment facility overflows, and mitigate impact of such overflows
 - d. Notification process
 - e. Annual Reports (CMAR Program)
 - f. Annual Goals (Annual Memo)
 - i. Sewer Use Ordinance Update
 - ii. Safety Procedures Review
 - iii. Information Material
 - iv. Grease Control Inspection Program
 - v. Sewer Cleaning Target
 - vi. Illegal Private I/I Sources
 - 1) Sump Pumps
 - 2) Foundation Drains
 - 3) Leaking Laterals
 - vii. Review Budget for Repair and Rehabilitation
 - viii. Annual Target for I/I Reduction
 - ix. Others
2. Organization
 - a. Ownership and Governing Body Description
 - b. Organizational Chart
 - c. Personnel and Position Descriptions
 - d. Internal Communication Procedures
 - i. Basement Back-Ups
 - ii. SSOs
 - iii. Pump Failures
 - iv. Electrical Outages
 - v. Worker Accidents
 - vi. Routine Operations and Maintenance (Standard Operating Procedures)
 - e. Public Information and Education Program
 - f. External Communications and Notifications
 - g. Internal Communications

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3. Legal Authority
 - a. Sewer Use Ordinance
 - b. Industrial Control Program
 - i. Categorical Industries
 - ii. Significant Industrial Users
 - c. Fat, Oil, and Grease Control
 - i. Contributors
 - ii. Control and Inspection Program
 - d. Illicit Discharge Controls
 - i. Commercial
 - ii. Industrial
 - e. Private Property Clear Water Control
 - i. Sump Pumps
 - ii. Foundation Drains
 - iii. Coordination with Cross-Connection Inspections or Meter Replacements
 - f. Private Lateral Inspections
 - g. Service and Maintenance Agreements
 - i. Equipment Servicing
 - ii. Inter-municipal Agreements
 - 1) Mutual Aid
 - 2) Wis WARN
 - h. Enforcement Action Protocols
 - i. New Construction Controls
 - i. Sewers
 - ii. Pumping Stations
 - iii. Force Mains
 - iv. Storm Water
 4. Operation and Maintenance
 - a. Adequate Equipment
 - i. Inventory (Annual Update)
 - ii. Critical Replacement Parts Inventory
 - b. Collection System Map
 - i. GIS Based
 - ii. Printed
 - c. Management Systems (Collection System Maintenance Plan)
 - i. Identify O and M Activities (Annual Update)
 - ii. Prioritize O and M (Annual Update)
 - iii. Structural Deficiencies (Annual Update)
 - iv. Deficiencies Summary and Action Plan (Annual Update)

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- d. Metrics (Annual Update)
 - i. Sewer Cleaning Percentage
 - ii. Root Removal
 - iii. Flow Monitoring
 - iv. Sewer Line Televising
 - v. Manhole Inspections
 - vi. Manhole Rehabilitation
 - vii. Mainline Rehabilitation
 - viii. Private Sewer Inspection
 - ix. Private Sewer I/I Removal
 - x. Lift Station O and M Activities
 - xi. Documented I/I Reduction
 - 1) Private I/I
 - 2) Manhole Inflow
 - 3) Manhole Rehabilitation
 - xii. Others
 - e. Training Summary (Annual Update)
 - f. Standards
5. Design and Performance Standards
- a. State Plumbing Code
 - b. Sewerage Administrative Codes
 - c. Local Codes
 - d. Standards and Procedures
 - i. Collection System Design
 - ii. Collection System Construction Inspection
6. Overflow Emergency Response Plan
- a. Alarm System and Routine Testing
 - b. Emergency Equipment
 - c. Emergency Procedures
 - i. SSOs
 - ii. Basement Back-Ups
 - iii. Power Outages
 - iv. Lift Station Failures
 - v. Sewer Blockages
 - vi. Force Main Breaks
 - vii. Severe Rain Events and Flooding
 - d. Mutual Aid Agreements

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- e. Communications
 - i. Responsible Persons Notification
 - 1) WWTP Superintendent
 - 2) Others
 - ii. External Reporting
 - 1) Public Health
 - 2) Public Notification
 - 3) Media
 - f. Annual Review Procedures-Emergency Response Efforts (Annual Update)
7. Capacity Assurance
- a. Current Sewer System Mapping
 - b. Sewer Systems Plans and Specifications
 - c. Manhole Location Maps
 - d. Lift Station Information
 - e. Lift Station Operation and Maintenance Manuals
 - f. Other Items Affecting Capacity
 - i. Flat Sewers
 - ii. Surcharging
 - iii. Bottlenecks
 - iv. Chronic Basement Back-Ups or SSOs
 - v. Debris Accumulation Sewers
 - vi. Heavy Root Growth Areas
 - vii. Areas with Excessive Infiltration/Inflow
 - viii. Corroded Manholes and Sewers
 - ix. Sewers with Capacity Defects
 - x. Capacity for New Connections
 - xi. Lift Station Capacity or Operating Issues
 - xii. Sewer Capacity Analysis-Voluntary
 - xiii. Sewer Capacity Analysis-Mandatory
 - 1) Basement Back-Ups Caused by Sewer Capacity Issues
 - a) Blockages
 - b) Grease Accumulation
 - c) Undersized Sewers
 - 2) SSOs
8. Annual Self-Audit
- a. Metrics
 - i. Lift Station Failures
 - ii. Sewer Pipe Failures
 - iii. SSOs

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- iv. Basement Backups
 - v. Complaints
 - vi. Peaking Factor Ratios
 - 1) Peak Monthly: Average Daily Flow
 - 2) Peak Weekly: Average Daily Flow
 - 3) Peak Hourly: Annual Daily Average
 - vii. Precipitation Records
 - viii. Others
9. Special Studies
- a. I/I Analysis
 - b. SSES
 - c. Smoke Testing
 - d. Sewer Evaluation and Capacity Assurance Plan (SECAP)
 - e. Lift Station Evaluation Report
10. Annual CMAR Scoring (Annual Update)

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