

PROPOSAL FOR PROFESSIONAL SERVICES

July 29, 2019

RE: Optimal Corrosion Control Treatment
Study
West Allis Water Utility
Baxter & Woodman No. 190972.10

Mike Brofka
City of West Allis
7525 W Greenfield Ave
West Allis WI 53214-4688

Thank you for inviting Baxter & Woodman to propose professional services for this project. We appreciate the information that you provided related to this project, which has helped us better understand your requirements and related issues. This proposal responds to your request, including a description of our proposed Scope of Services and budget information.

PROJECT DESCRIPTION

We understand that the Wisconsin Department of Natural Resources (DNR) is requiring the City of West Allis Water Utility (Utility) to conduct a demonstrative corrosion control treatment (CCT) study. The Utility received correspondence from DNR dated May 31, 2019, noting that DNR does not currently have sufficient system specific information to make a determination as to whether the Utility's existing CCT practices are optimized in a manner that minimizes lead and copper to the greatest extents possible.

According to Wis. Adm. Code Section NR 809.543(9), DNR is requiring the Utility to conduct a demonstrative study to determine if West Allis is practicing optimal CCT (OCCT). The Utility is required to provide a draft submittal to DNR describing plans for conducting the Demonstrative OCCT Study by October 31, 2019. The final report documenting the OCCT Study findings, conclusions and recommendation must be submitted to DNR no later than December 31, 2021.

The purpose of this Project is to evaluate the Utility's drinking water system and develop a report documenting how West Allis intends to minimize lead and copper in its system.

PROJECT TEAM

Baxter & Woodman's unequivocal commitment is to assign the right people with the right skills to be dedicated to your project from start to finish. Our team's project leader, **Patrick Planton**, has dedicated his career to drinking water engineering and has completed dozens of water utility treatment planning and engineering projects having requirements just like yours.

In addition, Mr. Planton and the Baxter & Woodman water engineering team are very familiar with the West Allis water system as they have been actively assisting the Water Utility with several projects over the past three years. Our Milwaukee office includes water treatment engineers who

are within minutes of City Hall, Public Works building, and all of the Water Utility supply and storage facilities.

To assist in the completion of the Utility's required OCCT Study, we are including the services, equipment and expertise of **Process Research Solutions, LLC** of Madison. Process Research Solutions was founded by **Abigail Cantor, P.E.**, in 1997 after nearly two decades of designing water and wastewater treatment processes in large engineering consulting firms. Ms. Cantor is recognized as a national expert in the field of internal corrosion in water distribution systems.

PROJECT APPROACH

The approach the Baxter & Woodman project team will take uses concepts from Water Research Foundation 4586, where a comprehensive perspective of water quality guides the collection and interpretation of information from a water distribution system. As stated by Process Research Solutions, the author of the report, this contrasts to regulatory directives which are overly simplistic and do not take into account a number of factors that can play a role in the release of lead and copper from pipe walls. Many of the factors are not affected by the regulatory treatment directives of pH and alkalinity adjustment, calcium hardness adjustment, or the addition of phosphate or silicate-based corrosion inhibitors.

These CCT Study techniques are used to determine empirically what shapes the water quality in a specific distribution system, including what affects the release of lead and copper. The OCCT Study methodology addresses the requirements of DNR, and goes beyond those requirements to better understand the control of lead and copper release in the West Allis water system.

SCOPE OF WORK

Process Research Solutions, LLC, will perform the following scope of services to assist the Utility in completing an OCCT Study that will meet the DNR requirements and submittal schedule. Baxter & Woodman will assist in gathering and organizing historical information for these tasks.

The scope of work has been broken down into the following project tasks:

Task Description

- 1 Existing Conditions and Water Quality
- 2 Desktop Evaluation, Monitoring Protocols and Reporting
- 3 Monitoring and Offline Testing

TASK 1 - EXISTING CONDITIONS AND WATER QUALITY

For Task 1, the following will be performed:

1. Collect and evaluate existing DNR water quality and other available data.
2. Review and evaluate existing water system configuration and operations.
3. Review chronology of any system operational changes.

4. Establish an on-going evaluation that continues to indicate the status of the water quality, including lead and copper release, and can be presented as part of a Lead and Copper Rule desktop study at any time in the future.
5. Provide guidance regarding analyses to be performed with profile sampling of residences and confirmation of protocols.
 - a. Profile sampling of residences provides insight into why individual buildings have elevated release of lead and copper.
 - b. This sampling can also identify common factors at work in the water system for metals release.
 - c. DNR also finds profile sampling informative and often encourages utilities to gather this type of residential data on the most critical residences known to release elevated lead or copper in a specific water system.
6. Provide guidance for possible analysis of scale from harvested pipes from the distribution system.
7. Review and tabulate system materials inventories with information provided by Utility.
8. Review customer complaint history provided by Utility.
9. Prepare a draft CCT Technical Memorandum summarizing findings of Task 1, and provide to Utility for review and comment.
10. Finalize Task 1 Technical Memorandum based on comments provided by Utility.

TASK 2 – DESKTOP EVALUATION, MONITORING PROTOCOLS AND REPORTING

For Task 2, the following will be performed:

1. Perform a desktop evaluation of treatments described in s. NR809.543(3).
2. Prepare the design of the distribution system monitoring and/or offline testing with a cost estimate and recommended protocols.
3. Prepare a preliminary OCCT Report incorporating the Task 1 Report, and addressing the DNR requirements for the West Allis water system.
4. Coordinate and attend a meeting with DNR representatives to discuss the West Allis preliminary OCCT Report.
5. Finalize preliminary OCCT Report based on Utility and DNR comments.

TASK 3 – MONITORING AND OFFLINE TESTING

The Tasks 3 scope of work will be dependent on the recommendations of the preliminary OCCT Report prepared in completing Task 2. The Task 3 will include the implementation of system monitoring and/or the recommended offline testing program. The scope, protocols, schedule and fee estimate will be provided to the Utility near the conclusion of Task 2.

PROJECT SCHEDULE

All large Wisconsin water systems (serving populations greater than 50,000 people) have specific milestones to achieve in complying with the DNR's OCCT Study requirements. These milestones are summarized below.

OCCT STUDY ITEM	Date to be Completed
CCT Study Proposal Due	October 31, 2019
CCT Study Proposal Meeting	Week of December 2, 2019
CCT Study Approval	December 31, 2019
Corrosion Control Study Progress Meeting	December 2020
Corrosion Control Study Completed	December 31, 2021
Corrosion Control Treatment Plan Modifications Completed	December 31, 2023
Corrosion Control Treatment Plan Modifications Completed	December 31, 2023

The West Allis Water Utility will benefit from the Baxter & Woodman team's demonstrated ability to meet your key DNR project milestones. We are available to begin this project immediately.

UTILITY RESPONSIBILITIES

The West Allis Water Utility, at its expense, shall do the following in a timely manner so as not to delay the Services.

- 1. Information / Reports:** Furnish the Baxter & Woodman project team with relevant project-related information, all of which Baxter & Woodman may rely upon without independent verification in performing the Services.
- 2. Representative:** Designate a representative for the Project who shall have the authority to transmit instructions, receive information, interpret and define the Utility's policies and make decisions with respect to the Services.
- 3. Decisions:** Provide all criteria and full information as to the Utility's requirements for the Project, obtain (with Baxter & Woodman's assistance, if applicable) necessary approvals, attend Project-related meetings, provide interim reviews on an agreed-upon schedule, make decisions on Project alternatives, and generally participate in the Project to the extent necessary to allow the Baxter & Woodman project team to perform the Services.
- 4. Other Responsibilities:** Pay directly any required lab water sample testing fees associated with the Project.

COMPENSATION

Hourly Basis Option

The Utility and Baxter & Woodman select the hourly basis for payment for services provided by the project team. Baxter & Woodman shall be compensated monthly. Monthly charges for services shall be based on the Baxter & Woodman project team's current billing rates for applicable employees plus charges for any expenses incurred. Current billing rates shall be the Actual Billing Rates of Personnel Method as summarized below.

Actual Billable Rates of Personnel Method - Applicable billing rates of the Baxter & Woodman project team members shall be based on the actual billable rates of personnel plus the cost of expenses as outlined below.

Our team's estimated level of effort for the scope of services for Tasks 1 and 2 outlined in this Proposal is \$18,000. The level of effort for Task 3 will be estimated upon the completion of Task 2.

It is agreed that after 90 percent of the estimated compensation has been earned on a task and if it appears that completion of the services cannot be accomplished within the remaining 10 percent of the estimated compensation, Baxter & Woodman will notify the Utility and confer with representatives of the Utility to determine the basis for completing the work.

Other Provisions Concerning Payments

1. Invoices will be prepared in accordance with Baxter & Woodman's standard invoicing practices and will be submitted monthly to the Utility by Baxter & Woodman.
2. Invoices are due and payable within 30 days of receipt.

Expenses

The following items involve expenditures made by Baxter & Woodman employees or professional consultants on behalf of the Utility. Their costs are not included in the hourly charges made for services and shall be paid for as described in this Proposal.

1. Transportation and travel expenses.
2. Lodging and meal expense connected with the Project.
3. Report or documentation reproduction expenses.
4. Other special expenses required in connection with the Project (e.g., cost of analysis of chemical scales on harvested pipes can run from \$900 to \$1,500 per sample plus shipping).

Additional services not identified in the scope, such as additional meetings or presentations, can be provided on a time and expense basis for the Baxter & Woodman project team members involved. Additional services will only be provided upon written authorization by the Utility.

SUMMARY

This letter proposal, which includes the Standard Terms and Conditions attached hereto, represents the entire understanding between the West Allis Water Utility and Baxter & Woodman in respect to providing services for this project, and may only be modified in writing signed by both parties. If it satisfactorily sets forth your understanding of our services, please sign below in the space provided. Please sign two copies keeping one for your files and returning one to us.

We appreciate this opportunity to be of service to the City of West Allis Water Utility. Upon review of our proposal, please do not hesitate to contact Patrick Planton at (262) 395-6406 or at pplanton@baxterwoodman.com if you have any questions or if you need additional information.

Sincerely,

BAXTER & WOODMAN, INC.
CONSULTING ENGINEERS



Derek J. Wold, P.E., BCEE
Executive Vice President



Patrick S. Planton, P.E., MBA
Water Department Manager

WEST ALLIS WATER UTILITY

ACCEPTED BY: Michael Brofka

TITLE: Water Division Superintendent

DATE: 10/15/19



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STANDARD TERMS AND CONDITIONS

Agreement - These Standard Terms and Conditions, together with the letter proposal, constitute the entire integrated agreement between the West Allis Water Utility (Owner) and Baxter & Woodman, Inc. (BW) and take precedence over any other provisions between the Parties. These terms may be amended, but only if both parties consent in writing.

Owner's Responsibility - Provide BW with all criteria and full information for the Project. BW will rely, without liability, on the accuracy and completeness of all information provided by the Owner including its consultants, contractor, specialty contractors, manufacturers, suppliers and publishers of technical standards without independently verifying that information. The Owner warrants that all known hazardous materials on or beneath the site have been identified to BW. BW and their consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, unidentified or undisclosed hazardous materials unless this service is set forth in the proposal.

Schedule for Rendering Services - The agreed upon services shall be completed within a reasonable amount of time allowing Owner to meet its key DNR project milestones as set forth in the Project Schedule summarized in the letter proposal. If BW is hindered, delayed or prevented from performing the services as a result of any act or neglect of the Owner or force majeure, BW's work shall be extended and the rates and amounts of BW's compensation shall be equitably adjusted in writing executed by all Parties.

Invoices and Payments - The fees to perform the proposed scope of services constitute BW's estimate to perform the agreed upon scope of services. Circumstances may dictate a change in scope, and if this occurs, an equitable adjustment in compensation and time shall be made by all parties. No service for which added compensation will be charged will be provided without first obtaining written authorization from the Owner.

Opinion of Probable Construction Costs - BW's opinion of probable construction costs represents its reasonable judgment as a professional engineer. Owner acknowledges that BW has no control over construction costs of contractor's methods of determining prices, or over competitive bidding, of market conditions. BW cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from BW's opinion of probable construction costs.

Standards of Performance - (1) The standard of care for all services performed or furnished by BW, will be completed with the same care and skill ordinarily used by professionals practicing under similar circumstances, at the same time and in the same locality on similar projects. (2) BW shall be responsible for the technical accuracy of its services and documents; (3) BW shall use reasonable care to comply with all applicable laws and regulations and Owner-mandated standards; (4) BW may employ such sub-consultants as BW deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objection by Owner; (5) BW shall not supervise, direct, control, or have authority over any contractor work (it is understood by the parties that sub-consultants are not considered "contractors"), nor have authority over or be responsible for the means, methods, techniques, sequencing, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety of the site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work; (6) BW neither guarantees the performance of any contractor nor assumes responsibility for contractor's failure to furnish and perform the work in accordance with the contract documents; (7) BW is not responsible for the acts or omissions of any contractor, subcontractor, or supplier, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work; (8) Shop drawing and submittal review by BW shall apply to only the items in the submissions and only for the purpose of assessing if upon installation or incorporation in the Project work they are generally consistent with the construction documents. Owner agrees that the contractor is solely responsible for the submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the construction documents. Owner further agrees that BW's review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. BW's consideration of a component does not constitute acceptance of the assembled item; (9) BW's site observation during construction shall be at the times agreed upon in the Project scope. Through standard, reasonable means, BW will become generally familiar with observable completed work. If BW observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and Owner for them to address.

Insurance - BW will maintain insurance coverage with the following limits and Certificates of Insurance will be provided to the Owner upon written request:

Worker's Compensation: Statutory Limits	Excess Umbrella Liability:	\$5 million per claim and aggregate
General Liability: \$1 million per claim	Professional Liability:	\$5 million per claim
		\$5 million aggregate
Automobile Liability: \$1 million combined single limit		

BW shall ensure the sub-consultants they employ on this Project maintain insurance coverage with similar limits to those set forth above. Any claim against BW arising out of this Agreement may be asserted by the Owner, but only against the entity and not against BW's directors, officers, shareholders or employees, none of whom shall bear any liability and may not be subject to any claim.

Indemnification and Mutual Waiver - (1) To the fullest extent permitted by law, BW shall indemnify and hold harmless the Owner, which shall include such party's officers and employees, from claims, costs, losses, and damages arising out of or relating to the Project, provided that such claims, costs, losses, or damages are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by the indemnifying party's negligent acts or omissions (2) In the event claims, losses, damages or expenses are caused by the joint or concurrent fault of BW and Owner, they shall be borne by each party in proportion to their respective fault, as determined by a court of competent jurisdiction; (3) The Owner acknowledges that BW is a business corporation and not a professional service corporation, and further acknowledges, accepts, and agrees that BW's officers, directors, and employees shall not be subject to any personal liability for services provided under this Agreement.

Nothing contained within this Agreement is intended to be a waiver or estoppel of the City or its insurer to rely upon the limitations, defenses and immunities contained within Wisconsin Statutes sections 893.80 and 345.05. To the extent that indemnification is available and enforceable, the City or its insurer shall not be liable in indemnity, contribution or otherwise for an amount greater than the limits of liability for municipal claims established by Wisconsin law.

Termination - Either party may terminate this Agreement upon ten (10) business days' written notice to the other party in the event of failure by the other party to perform with the terms of the Agreement through no fault of the terminating party. A condition precedent to termination shall be an opportunity for the Parties to meet. If this Agreement is terminated, Owner shall receive reproducible copies of drawings, developed applications and other completed documents. Owner shall be liable for, and promptly pay for all services and reimbursable expenses rendered to the date of suspension/termination of services.

Use of Documents - BW documents are instruments of service and BW retains ownership and property interest (including copyright and right of reuse). Owner shall not rely on such documents unless in printed form, signed or sealed by BW or its consultant. Electronic format of BW's design documents may differ from the printed version and BW bears no liability for errors, omissions or discrepancies. Reuse of BW's design documents is prohibited and Owner shall defend and indemnify BW from all claims, damages, losses and expenses, including attorney's fees, consultant/expert fees, and costs arising out of or resulting from said reuse. Nothing herein shall restrict Owner's obligations pursuant to the Wisconsin Open Records law. BW's document retention policy will be followed upon Project closeout, and project documents will be kept for a period of 14 years after Project closeout.

Successors, Assigns, and Beneficiaries - Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or BW to any third party, including any lender, Contractor, Contractor's subcontractor, supplier, manufacturer, other individual, entity or public body, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement are for the sole and exclusive benefit of the Owner and BW and not for the benefit (intended, unintended, direct or indirect) of any other entity or person.

Dispute Resolution - All disputes between the Parties shall first be negotiated between them for a period of thirty (30) days. If unresolved, disputes shall be then submitted to mediation as a condition precedent to litigation. If mediation is unsuccessful, litigation in the county where the Project is pending shall be pursued.

Miscellaneous Provisions - (1) This Agreement is to be governed by the law of the state or jurisdiction in which the Project is located. (2) All notices must be in writing and shall be deemed effectively served upon the other party when sent by certified mail, return receipt requested; (3) All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason; (4) Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Owner and BW, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close to expressing the intention of the stricken provision; (5) A party's non-enforcement of any provision shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement; (6) To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of substantial completion, which is the point where the Project can be utilized for the purposes for which it was intended.