

**Memorandum
Public Works Department**



To: City Manager
Subject: Water Treatment Plant Filter Building Replacement
Date: March 30, 2015
Number: 2015-052

Attached is an Engineering Design Services Proposal from CDM Smith, Inc. for engineering design services on the replacement for the Water Treatment Plant Filter Building.

The scope of work to be covered by this proposal is for engineering design services, including the preparation of detailed plans and specifications for the replacement of the Water Treatment Plant Filter Building. CDM Smith has included services necessary for submittals for approval by all required regulatory agencies, as well as assistance with any grant applications and application for an IEPA SRF Loan. CDM Smith was selected in 2012 to perform the preliminary study and design services for this project.

CDM Smith proposes to provide these engineering services at their standard hourly rates for an estimated cost of \$1,749,513.

Recommendation

The Public Works Department recommends that the City Council approve the Engineering Services proposal from CDM Smith, Inc. in the amount of \$1,749,513 and authorize the City Manager to execute the contract documents.

Vendor:	CDM Smith, Inc.
Proposal Amount:	\$1,749,513
Fund:	501 Water Operation & Maintenance
Department:	618 Utilities Service
Cost Center:	352 Water Treatment Plant
Object Code:	56501 Engineering Services
Project	2760 Water Treatment Plant Filter Building Replacement

Requisition #: R005404

Submitted by: Randall D. Tweet, Public Works Director
Michael J. Kane, P.E., City Engineer

Approved by: Thomas Thomas, City Manager

**STANDARD FORM OF AGREEMENT
BETWEEN
OWNER AND ENGINEER**

THIS IS AN AGREEMENT made as of March 26, 2015 between City of Rock Island ("OWNER") and CDM Smith ("ENGINEER").

OWNER's Project is generally identified as follows Design of new Filtration Facility at the Rock Island Water Treatment Plant (the "Project").

OWNER and ENGINEER, in consideration of their mutual covenants herein, agree in respect of the performance or furnishing of services by ENGINEER to the Project and the payment for those services by OWNER as set forth below. Execution of this Agreement by ENGINEER and OWNER constitutes OWNER's written authorization to ENGINEER to proceed on the date first above written with the Services described in Article 1 below. This Agreement will become effective on the date first above written.

ARTICLE 1 – SCOPE OF SERVICES

- 1.1 ENGINEER agrees to perform, or cause to be performed, for OWNER services as described in Exhibit A (hereinafter referred to as "Services") in accordance with the requirements outlined in this Agreement.

ARTICLE 2 – TIMES FOR RENDERING SERVICES

- 2.1 Specific time periods and/or specific dates for the performance of ENGINEER's Services are set forth in Exhibit A.
- 2.2 If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- 2.3 If Owner authorizes changes in the scope, extent, or character of the Project or Engineer's services, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- 2.4 Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services. If ENGINEER's services are delayed or suspended in whole or in part by OWNER for more than three months through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of the schedule and of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, among other things, reasonable costs incurred by ENGINEER in connection with such delay or suspension and reactivation.

ARTICLE 3 – OWNER'S RESPONSIBILITIES

OWNER shall:

- 3.1 Pay the ENGINEER in accordance with the terms of this Agreement.
- 3.2 Designate in writing a person to act as OWNER's representative with respect to the services to be performed or furnished by ENGINEER under this Agreement. Such person will have complete authority to transmit instructions, receive information, interpret, and define OWNER's policies and

decisions with respect to ENGINEER's services for the Project.

- 3.3 Provide all criteria and full information as to OWNER's requirements for the Project, including, as applicable to the Services, design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications.
- 3.4 Be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.
- 3.5 Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of any development that affects the scope or time of performance or furnishing of ENGINEER's Services or any relevant, material defect or nonconformance in ENGINEER's Services or in the work of any Contractor employed by Owner on the Project.
- 3.6 Bear all costs incident to compliance with the requirements of this Article 3.

ARTICLE 4 – PAYMENTS TO ENGINEER FOR SERVICES

- 4.1 Methods of Payment for Services of ENGINEER.
 - 4.1.1 OWNER shall pay ENGINEER for Services performed or furnished under this Agreement or as described in Exhibit A. The amount of any excise, VAT, or gross receipts tax that may be imposed shall be added to the compensation shown in Exhibit A. If after the Effective Date any governmental entity takes a legislative action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional taxes in addition to the compensation to which Engineer is entitled.
 - 4.1.2 Invoices for Services will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER at least monthly. Payments are due within 30 days of receipt of invoice.
 - 4.1.3 If OWNER fails to make any payment due ENGINEER for services and expenses within thirty days after receipt of ENGINEER's invoice therefor, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and, in addition, ENGINEER may, after giving seven days' written notice to OWNER, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses and charges. Payments will be credited first to interest and then to principal. In the event of a disputed or contested billing, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

OWNER agrees to pay ENGINEER all costs of collection including but not limited to reasonable attorneys' fees, collection fees and court costs incurred by ENGINEER to collect properly due payments.

ARTICLE 5 – GENERAL CONDITIONS

5.1 Standard of Care

The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar conditions at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer.

5.2 Technical Accuracy

Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in Owner-furnished information.

5.3 Opinions of Probable Construction Cost

Engineer's opinions (if any) of probable Construction Cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, then Owner agrees to obtain an independent cost estimate.

5.4 Compliance with Laws and Regulations, and Policies and Procedures

5.4.1 Engineer and Owner shall comply with applicable Laws and Regulations.

5.4.2 This Agreement is based on Laws and Regulations procedures as of the Effective Date. Changes after the Effective Date to Laws and Regulations may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation.

5.4.3 Engineer shall not be required to sign any document, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such document.

5.4.4 Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

5.4.5 Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's, failure to furnish and perform the Work in accordance with the Construction Contract Documents.

5.4.6 Engineer shall not be responsible for any decision made regarding the Construction Contract Documents, or any application, interpretation, clarification, or modification of the

- Construction Contract Documents, other than those made by Engineer or its Consultants.
- 5.4.7 Engineer is not required to provide and does not have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements.
- 5.4.8 Engineer's services do not include providing legal advice or representation.
- 5.4.9 Engineer's services do not include (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission, or (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances.
- 5.4.10 While at the Site, Engineer, its Consultants, and their employees and representatives shall comply with the applicable requirements of Contractor's and Owner's safety programs of which Engineer has been informed in writing.

5.5 Termination

The obligation to provide further services under this Agreement may be terminated:

- 5.5.1 For cause,
- a. by either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
 - b. by Engineer:
 - 1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
 - 2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern.
 - 3) Engineer shall have no liability to Owner on account of such termination.
 - c. Notwithstanding the foregoing, this Agreement will not terminate for cause if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
- 5.5.2 For convenience, by Owner effective upon Engineer's receipt of notice from Owner.
- 5.5.3 Effective Date of Termination: The terminating party under Paragraph 5.5.1 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose

value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

5.5.4 Payments Upon Termination:

- a. In the event of any termination under Paragraph 5.5, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 5.6.
- b. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 5.5.4.a, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs.

5.6 Use of Documents

- 5.6.1 All Documents are instruments of service, and ENGINEER shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the ENGINEER) whether or not the Project is completed.
- 5.6.2 If Engineer is required to prepare or furnish Drawings or Specifications under this Agreement, Engineer shall deliver to Owner at least one original printed record version of such Drawings and Specifications, signed and sealed according to applicable Laws and Regulations.
- 5.6.3 Owner and Engineer may transmit, and shall accept, Project-related correspondence, Documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol. If this Agreement does not establish protocols for electronic or digital transmittals, then Owner and Engineer shall jointly develop such protocols. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.
- 5.6.4 OWNER may make and retain copies of Documents for information and reference in connection with use on the Project by OWNER. Upon receipt of full payment due and owing for all Services, ENGINEER grants OWNER a license to use the Documents on the Project, extensions of the Project, and related uses of OWNER, subject to the following limitations: (1) OWNER acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by ENGINEER, or for use or reuse by OWNER or others on extensions of the Project or on any other project without written verification or adaptation by ENGINEER; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at OWNER's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants; (3) OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification without written verification, completion, or

adaptation by ENGINEER; (4) such limited license to OWNER shall not create any rights in third parties.

5.6.5 If ENGINEER at OWNER's request verifies or adapts the Documents for extensions of the Project or for any other project, then OWNER shall compensate ENGINEER at rates or in an amount to be agreed upon by OWNER and ENGINEER.

5.7 Controlling Law

This Agreement is to be governed by the Laws and Regulations of the state in which the Project is located.

5.8 Mutual Waiver of Consequential Damages

Notwithstanding any other provision of this Agreement to the contrary, neither party including their officers, agents, servants and employees shall be liable to the other for lost profits or any special, indirect, incidental, or consequential damages in any way arising out of this Agreement however caused under a claim of any type or nature based on any theory of liability (including, but not limited to: contract, tort, or warranty) even if the possibility of such damages has been communicated.

5.9 Limitation of Liability

In no event shall ENGINEER's total liability to OWNER and/or any of the OWNER's officers, employees, agents, contractors or subcontractors for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to this agreement from cause or causes, including, but not limited to, ENGINEER's wrongful act, omission, negligence, errors, strict liability, breach of contract, breach of warranty, express or implied, exceed the total amount of fee paid to ENGINEER under this agreement or \$50,000, whichever is greater.

5.10 Successors and Assigns

5.10.1 OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 5.10.2 the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

5.10.2 Neither OWNER nor ENGINEER may assign, sublet or transfer any rights under or interest (including, but without limitation, moneys that may become due or moneys that are due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

5.10.3 Unless expressly provided otherwise in this Agreement:

- a. Nothing in this Agreement shall be construed to create, impose or give rise to any duty owed by ENGINEER to any Constructor, other person or entity, or to any surety for or employee of any of them, or give any rights in or benefits under this Agreement to anyone other than OWNER and ENGINEER.
- b. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party.

5.11 Notices

Any notice required under this Agreement will be in writing, addressed to the appropriate party at the address which appears on the signature page to this Agreement (as modified in writing from time to time by such party) and given personally, by registered or certified mail, return receipt requested, by facsimile, or by a nationally recognized overnight courier service. All notices shall be effective upon the date of receipt.

5.12 Severability

Any provision or part of the Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who 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 as possible to expressing the intention of the stricken provision.

5.13 Changed Conditions

If concealed or unknown conditions that affect the performance of the Services are encountered, which conditions are not ordinarily found to exist or which differ materially from those generally recognized as inherent in the Services of the character provided for under this Agreement or which could not have reasonably been anticipated, notice by the observing party shall be given promptly to the other party and, if possible, before conditions are disturbed. Upon claim by the ENGINEER, the payment and schedule shall be equitably adjusted for such concealed or unknown condition by change order or amendment to reflect additions that result from such concealed, changed, or unknown conditions.

5.14 Environmental Site Conditions

It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to Constituents of Concern, as defined in Article 6. If ENGINEER or any other party encounters an undisclosed Constituent of Concern, or if investigative or remedial action, or other professional services, are necessary with respect to disclosed or undisclosed Constituents of Concern as defined in Article 6, then ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (1) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Constituents of Concern, and (2) warrants that the Site is in full compliance with applicable Laws and Regulations.

If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of ENGINEER's services under this Agreement, then the ENGINEER shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on 30 days' notice.

OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, so defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with ENGINEER's activities under this Agreement.

5.15 Insurance

ENGINEER shall procure and maintain insurance for protection from claims under workers' compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages because of injury to or destruction of property.

5.16 Discovery

ENGINEER shall be entitled to compensation on a time and materials basis when responding to all requests for discovery relating to this Project and to extent that ENGINEER is not a party to the lawsuit.

5.17 Nondiscrimination and Affirmative Action

In connection with its performance under this Agreement, ENGINEER shall not discriminate against any employee or applicant for employment because of race, color, creed, religion, age, sex, marital status, sexual orientation or affectional preference, national origin, ancestry, citizenship, physical or mental handicap or because he or she is a disabled veteran or veteran of the Vietnam era. ENGINEER shall take affirmative action to ensure that qualified applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, age, sex, marital status, sexual orientation or affectional preference, national origin, ancestry, citizenship, physical or mental handicap or because he or she is a disabled veteran or veteran of the Vietnam era. Such actions shall include recruiting and hiring, selection for training, promotion, fixing rates or other compensation, benefits, transfers and layoff or termination.

5.18 Force Majeure

Any delays in or failure of performance by ENGINEER shall not constitute a default under this Agreement if such delays or failures of performance are caused by occurrences beyond the reasonable control of ENGINEER including but not limited to: acts of God or the public enemy; expropriation or confiscation; compliance with any order of any governmental authority; changes in law; act of war, rebellion, terrorism or sabotage or damage resulting therefrom; fires, floods, explosions, accidents, riots; strikes or other concerted acts of workmen, whether direct or indirect; delays in permitting; OWNER's failure to provide data in OWNER's possession or provide necessary comments in connection with any required reports prepared by ENGINEER, or any other causes which are beyond the reasonable control of ENGINEER. ENGINEER's scheduled completion date shall be adjusted to account for any force majeure delay and ENGINEER shall be reimbursed by OWNER for all costs incurred in connection with or arising from a force majeure event, including but not limited to those costs incurred in the exercise of reasonable diligence to avoid or mitigate a force majeure event.

5.19 Waiver

Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

5.20 Headings

The headings used in this Agreement are for general reference only and do not have special significance.

5.21 Subcontractors

ENGINEER may utilize such ENGINEER's Subcontractors as ENGINEER deems necessary to assist in the performance of its Services.

5.22 Coordination with Other Documents

It is the intention of the parties that if the ENGINEER's Services include design then the Standard General Conditions will be used as the General Conditions for the Project and that all amendments thereof and supplements thereto will be generally consistent therewith. Except as otherwise defined herein, the terms which have an initial capital letter in this Agreement and are defined in the Standard General Conditions will be used in this Agreement as defined in the Standard General

Conditions. The term “defective” will be used in this Agreement as defined in the Standard General Conditions.

5.23 Purchase Order

Notwithstanding anything to the contrary contained in any purchase order or in this Agreement, any purchase order issued by OWNER to ENGINEER shall be only for accounting purposes for OWNER and the pre-printed terms and conditions contained on any such purchase order are not incorporated herein, shall not apply to this Agreement, and shall be void for the purposes of the Services performed by ENGINEER under this Agreement.

5.24 Dispute Resolution

In the event of any dispute between the parties arising out of or in connection with the contract or the services or work contemplated herein; the parties agree to first make a good faith effort to resolve the dispute informally. Negotiations shall take place between the designated principals of each party. If the parties are unable to resolve the dispute through negotiation within 45 days, then either party may give written notice within 10 days thereafter that it elects to proceed with non-binding mediation pursuant to the commercial mediation rules of the American Arbitration Association. In the event that mediation is not invoked by the parties or that the mediation is unsuccessful in resolving the dispute, then either party may submit the controversy to a court of competent jurisdiction. The foregoing is a condition precedent to the filing of any action other than an action for injunctive relief or if a Statute of Limitations may expire.

Each party shall be responsible for its own costs and expenses including attorneys' fees and court costs incurred in the course of any dispute, mediation, or legal proceeding. The fees of the mediator and any filing fees shall be shared equally by the parties.

ARTICLE 6 – DEFINITIONS

Whenever used in this Agreement the following terms have the meanings indicated which are applicable to both the singular and the plural.

6.1 Agreement

This Agreement between OWNER and ENGINEER for Professional Services including those exhibits listed in Article 7.

6.2 Constituent of Concern

Any substance, product, waste, or other material of any nature whatsoever (including, but not limited to, Asbestos, Petroleum, Radioactive Material, and PCBs) which is or becomes listed, regulated, or addressed pursuant to [a] the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); [b] the Hazardous Materials Transportation Act, 49 U.S.C. §§1801 et seq.; [c] the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); [d] the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; [e] the Clean Water Act, 33 U.S.C. §1251 et seq.; [f] the Clean Air Act, 42 U.S.C. §§7401 et seq.; and [g] any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

6.3 Construction Cost – ♦

♦ This provision is applicable for projects where ENGINEER provides Design, Bidding and/or Construction Phase Services.

The total cost to OWNER of those portions of the entire Project designed or specified by ENGINEER. Construction Cost does not include ENGINEER's compensation and expenses, the cost of land, rights-of-way, or compensation for or damages to properties, or OWNER's legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project or the cost of other services to be provided by others to OWNER pursuant to Article 3. Construction Cost is one of the items comprising Total Project Costs.

- 6.4 Constructor
Any person or entity (not including the Engineer, its employees, agents, representatives, and Consultants), performing or supporting construction activities relating to the Project, including but not limited to Contractors, Subcontractors, Suppliers, Owner's work forces, utility companies, other contractors, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.
- 6.5 Contractor - ♦
The person or entity with whom OWNER enters into a written agreement covering construction work to be performed or furnished with respect to the Project.
- 6.6 Documents
As applicable to the Services, the data, reports, drawings, specifications, record drawings and other deliverables, whether in printed or electronic media format, provided or furnished by ENGINEER to OWNER pursuant to the terms of this Agreement.
- 6.7 ENGINEER's Subcontractor.
A person or entity having a contract with ENGINEER to perform or furnish Services as ENGINEER's independent professional subcontractor engaged directly on the Project.
- 6.8 Reimbursable Expenses.
The expenses incurred directly in connection with the performance or furnishing of Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit A.
- 6.9 Resident Project Representative - ♦
The authorized representative of ENGINEER who will be assigned to assist ENGINEER at the site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are set forth in Exhibit B, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative" ("Exhibit B").
- 6.10 Standard General Conditions - ♦
The Standard General Conditions of the Construction Contract (No. C-700) of the Engineers Joint Contract Documents Committee.
- 6.11 Total Project Costs - ♦
The sum of the Construction Cost, allowances for contingencies, the total costs of design

♦ This provision is applicable for projects where ENGINEER provides Design, Bidding and/or Construction Phase Services.

professional and related services provided by ENGINEER and (on the basis of information furnished by OWNER) allowances for such other items as charges of all other professionals and consultants, for the cost of land and rights-of-way, for compensation for or damages to properties, for interest and financing charges and for other services to be provided by others to OWNER under Article 3.

6.12 Work - ♦

The entire construction or the various separately identifiable parts thereof required to be provided under the Construction Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Construction Contract Documents.

ARTICLE 7 – EXHIBITS AND SPECIAL PROVISIONS

7.1 This Agreement is subject to the provisions of the following Exhibits which are attached to and made a part of the Agreement:

Exhibit A - Engineer's Services, Owner's Responsibilities, Time for Performance, Method of Payment, and Special Provisions.

Exhibit B - Scope of Services, Schedule and Fee – February 2015

This Agreement (consisting of Pages 1 to 11 inclusive), and the Exhibits identified above constitute the entire agreement between OWNER and ENGINEER and supersede all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

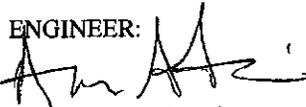
IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the date first above written.

OWNER:

By:
Title:
Date:

Address for giving notices:

ENGINEER:



By: Amrou Atassi
Title: Principal Engineer
Date: 3/26/15

Address for giving notices:

125 South Wacker Drive, Suite 600
Chicago, IL 60606

**EXHIBIT A
TO AGREEMENT BETWEEN
OWNER AND ENGINEER
Scope of Work**

This is an exhibit attached to and made a part of the Agreement dated March 26, 2015, between City of Rock Island (OWNER) and CDM Smith (ENGINEER) for professional services.

1.0 ENGINEER'S SERVICES

1.2 Design Phase

- 1.2.1 Prepare for incorporation in the Contract Documents final Drawings showing the scope, extent and character of the work to be performed and furnished by Contractor and Specifications (which will be prepared, where appropriate, in general conformance with the standards of the Construction Specifications Institute).
- 1.2.2 Provide technical criteria, written descriptions and design data for OWNER's use in filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to review or approve the final design of the Project, and assist OWNER in consultations with appropriate authorities.
- 1.2.3 Advise OWNER of any adjustments to the opinion of probable Construction Cost and any adjustments to Total Project Costs known to ENGINEER as a result of changes in scope, extent or character or design requirements of the Project.
- 1.2.4 Prepare for review and approval by OWNER, its legal counsel and other advisors, contract agreement forms, general conditions and supplementary conditions, and (where appropriate) bid forms, invitations to bid and instructions to bidders, and assist in the preparation of other related documents.
- 1.2.5 Furnish five copies of the above documents, Drawings and Specifications to and review them with OWNER.
- 1.2.6 ENGINEER's services under the Design Phase will be considered complete at the earlier of (1) the date when the submittals have been accepted by OWNER or (2) thirty days after the date when such submittals are delivered to OWNER for final acceptance, plus in each case such additional time as may be considered reasonable for obtaining approval of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by ENGINEER, if such approval is to be obtained during the Design Phase.

The duties and responsibilities of ENGINEER during the Design Phase are amended and supplemented as follows:

See Exhibit B – Scope of Work dated February 2015.

1.3 Bidding or Negotiating Phase

After acceptance by OWNER of the ENGINEER's Drawings, Specifications and other Design Phase documentation (including the most recent opinion of probable Construction Cost), and upon written authorization to proceed, ENGINEER shall:

- 1.3.1 Assist OWNER in advertising for and obtaining bids or negotiating proposals for the contract

for construction, materials, equipment and services; and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-bid conferences, if any, and receive and process deposits for Bidding Documents.

- 1.3.2 Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
- 1.3.3 Consult with OWNER as to the acceptability of subcontractors, suppliers and other persons and entities proposed by Contractor for those portions of the work as to which such acceptability is required by the Bidding Documents.
- 1.3.4 Attend the bid opening, prepare bid tabulation sheets and assist OWNER in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.
- 1.3.5 The Bidding or Negotiating Phase will terminate and the Services to be performed or furnished thereunder will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors.

The duties and responsibilities of ENGINEER during the Bidding or Negotiating Phase as set forth in this paragraph 1.3 are amended and supplemented as follows:

See Exhibit B 0 Scope of Work dated February 2015.

2.0 OWNER'S RESPONSIBILITIES

- 2.1 Furnish to ENGINEER, as requested by ENGINEER for performance of Services as required by the Contract Documents, the following:
 - 2.1.1 Data prepared by or services of others, including without limitation explorations and tests of subsurface conditions at or contiguous to the site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site, or hydrographic surveys;
 - 2.1.2 The services of an independent testing laboratory to perform all inspections, tests and approvals of samples, materials and equipment;
 - 2.1.3 Appropriate professional interpretation of all of the foregoing;
 - 2.1.4 Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the site and adjacent areas;
 - 2.1.5 Field surveys for design purposes and property, boundary, easement, right-of-way, topographic and utility surveys or data, including relevant reference points;
 - 2.1.6 Property descriptions;
 - 2.1.7 Zoning, deed and other land use restrictions; and
 - 2.1.8 Other special data or consultations not covered in Article 2.

OWNER shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all reports, data and other information furnished pursuant to this paragraph. ENGINEER may use such reports, data and information in performing or furnishing services under this Agreement.

- 2.2 Provide, as required by the Contract Documents, engineering surveys and staking to enable Contractor to

proceed with the layout of the work, and other special field surveys.

- 2.3 Provide access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under this Agreement.
- 2.4 Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor and other consultants as OWNER deems appropriate with respect to such examination) and render in writing decisions pertaining thereto.
- 2.5 Provide approvals and permits from all governmental authorities having jurisdiction to approve the portions of the Project designed or specified by ENGINEER and such approvals and consents from others as may be necessary for completion of such portions of the Project.
- 2.6 Provide, as may be required for the Project:
 - 2.6.1 Accounting, bond and financial advisory, independent cost estimating and insurance counseling services;
 - 2.6.2 Such legal services as OWNER may require or ENGINEER may reasonably request with regard to legal issues pertaining to the Project, including any that may be raised by Contractor; and
 - 2.6.3 Such auditing services as OWNER may require to ascertain how or for what purpose Contractor has used the moneys paid on account of the Contract Price.
- 2.7 Provide such inspection or monitoring services by an individual or entity other than ENGINEER as OWNER may desire to verify:
 - 2.7.1 That Contractor is complying with any law, rule, regulation, ordinance, code or order applicable to Contractor's performing and furnishing the work; or
 - 2.7.2 That Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.

ENGINEER does not undertake in this Agreement to perform the services referred to in 2.7.1 and 2.7.2 above. The identity of any individual or entity employed to perform such services and the scope of such services will be disclosed to ENGINEER.

- 2.8 Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, Construction Management, Cost Estimating, Project Peer Review, Value Engineering, and Constructability Review. If OWNER designates a person or entity other than, or in addition to, ENGINEER to represent OWNER at the site, OWNER shall define and set forth in an exhibit that is to be mutually agreed upon and attached to and made a part of this Agreement before such services begin, the duties, responsibilities and limitations of authority of such other party and the relation thereof to the duties, responsibilities and authority of ENGINEER.
- 2.9 Prior to the commencement of the Construction Phase, notify ENGINEER of any variations in the language of the Notice of Acceptability of Work, or of any notice or certification other than such Notice that ENGINEER will be requested to provide to OWNER or third parties in connection with the financing or completion of the Project. OWNER and ENGINEER shall reach agreement on the terms of any such requested notice or certification and OWNER shall authorize such Special Services as are necessary to enable ENGINEER to provide the notice or certification requested under this paragraph.

- 2.10 If more than one prime contract is to be awarded for work designed or specified by ENGINEER, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime contractors, and define and set forth the duties, responsibilities and limitations of authority of such person or entity and the relation thereof to the duties, responsibilities and authority of ENGINEER in an exhibit that is to be mutually agreed upon and attached to and made a part of this Agreement before such services begin.
- 2.11 Furnish to ENGINEER data or estimated figures as to OWNER's anticipated costs for services to be provided by others for OWNER (such as services pursuant to paragraphs 2.1, 2.2 and 2.4 through 2.11, inclusive) and other costs so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.
- 2.12 Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job-related meetings and Substantial Completion and final payment inspections.
- 2.13 Provide labor and safety equipment to open and protect manholes and/or to operate valves and hydrants as required by the ENGINEER.
- 2.14 Bear all costs incident to compliance with the requirements of the OWNER's Responsibilities.

3.0 TIME PERIOD FOR PERFORMANCE

The time periods for the performance of ENGINEER's services as set forth in Article 2 of said Agreement are as follows:

The schedule is provided in Exhibit B, Scope of Work.

4.0 METHOD OF PAYMENT

The method of payment for Services rendered by ENGINEER shall be as set forth below:

For the Basic Services performed under Section 1, the OWNER agrees to pay the ENGINEER the lump sum fee of \$1,749,513, partial payments to be made on a monthly basis in proportion to the percentage of work completed and the balance of payment made when the Drawings, Specifications and Contract Documents are completed.

5.0 SPECIAL PROVISIONS

OWNER has established the following special provisions and/or other considerations or requirements in respect of the Assignment:

n/a

**Scope of Services –February 2015
City of Rock Island - Water Plant Filtration
Facility Design and Bidding Services**

**CDM
Smith**

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Scope of Services –February 2015

City of Rock Island - Water Plant Filtration Facility Design and Bidding Services

In August 2013, CDM Smith submitted the Final Water Treatment Filtration Facility Report. The Facility Plan Report recommended abandoning the existing filtration system and building a new conventional filtration facility capable of producing a reliable firm capacity of 12 MGD. This work was considered the first phase (Phase 1) of a multi-year filtration facility improvements.

In June thru November of 2014, CDM Smith and the City of Rock Island (City) conducted pilot testing of different conventional filtration media columns and the Draft Pilot Report was submitted on January 21, 2015. The findings of the pilot testing were consistent with the recommendations of the Facility Plan Report.

Based on the 2013 Facility Plan Report and 2014 pilot testing, the City asked CDM Smith to prepare a scope of work and fee for design and bidding services for a new conventional filtration facility.

This document summarizes the proposed scope of work to provide professional engineering services for the design and bidding phase (Phase 2) of a new Filtration Facility for the City of Rock Island Water Treatment Plant. This scope of work is based on the recommended Filtration Report and layouts and assumptions included in the August 2013 Facility Plan Report. A copy of the layouts used as a basis for this scope of work is attached.

The scope of the proposed improvements includes the following:

- New Filtration Facility housing eight (8) dual media gravity filters with the required ancillary instruments and control systems (the Facility is assumed to be a two-level building);
- Filtrate pumping system capable of lifting the water from the gravity filters to the finished water domes;
- Backwash pumping system, including a backwash storage tank;
- Air scour system;
- Backwash waste system to divert the backwash waste to the backwash residuals basin;
- Drain pumping system to allow the filters to be drained;
- Electrical room housing the motor control center and VFDs for the pumping systems;
- Process piping for the filters and above systems with the capability to allow UV reactors to be added in the future on the filtered water side;
- The new Filtration Facility shall also include locker-rooms, conference room, and a control room for the operators;
- Two settled water piping feeds from the SuperPulsators to the Filtration Facility;

- Two finished water piping from the Filtration Facility to the finished water domes; and
- General civil/site improvements for the new Filtration Facility and associated yard piping.

Phase 2 Design and Bidding Services - Task Descriptions

Task 2.1 – Kickoff Meeting and Development of Project Plan

Subtasks

- 2.1.1 Plan, schedule, facilitate, and document the results of a Project “Kick-off” workshop. Suggested attendees would include utility managers and operations and maintenance staff. Objectives for the Kick-off workshop include:
- a. review the Project scope, schedule, budget, and potential funding sources
 - b. establish the City’s Project expectations
 - c. clearly define and prioritize the goals and objectives of the Project
 - d. identify project stakeholders for permitting and review
- 2.1.2 Prepare appropriate meeting materials and document the results of the workshop in the form of a meeting summary document.
- 2.1.3 Develop a Project plan that includes the following components:
- Overall Project schedule
 - Overall Project team
 - Overall Project QAQC and checking responsibilities
 - Identification of permitting agencies and action plan to receive timely permits
 - Project communication protocol between team members and between CDM Smith and the City
 - Identification of Project deliverables, including 10%, 30%, 60% and 90% design milestones
 - Other critical Project items defined at the Kickoff Meeting

Deliverables

- “Project Kick-off” Workshop Summary
- Project Plan

Meetings

- “Project Kick-off” Workshop with City staff

Task 2.2 – Conduct “Design Related” Field Activities and Investigations

Subtasks

As part of this task, the project team will review the design concept developed as part of the Study phase and verify the layout of the Facility. Several parallel sub-tasks will be completed, including:

- 2.2.1 Gather, assemble, and review information from the City related to existing drawings and records. Conduct site visit to review existing site conditions related to electrical capacity onsite, confirm location of facilities and structures near the proposed Filtration Facility.
- 2.2.2 Process Confirmation – As part of this task, the project team will confirm the layouts developed in the 2013 Report with regard the number of filters, layouts of each filter box, and overall building dimensions and requirements. The project team will develop a “high level” estimate of electrical requirements to estimate the required electrical capacity for the new Filtration Facility. This information is critical prior to proceeding with the structural and electrical evaluations.
- 2.2.3 Geotechnical Evaluation – This includes two soil borings at the proposed Filtration Facility site and a geotechnical evaluation. Recommendations for the building foundation will be provided. This work will be performed by a local geotechnical sub-consultant and reviewed by CDM Smith.
- 2.2.4 Structural Evaluation – Given the close proximity of the proposed Filtration Facility to the existing structures (existing filtration facility and elevated tank), a structural evaluation will be completed. Structural calculations/analysis will be performed to determine the proper foundation design and maximum allowable footing depth without comprising nearby structures. This work will be completed following the geotechnical evaluation.
- 2.2.5 Site Survey – Conduct survey of the area surrounding the proposed filtration facility. Survey will include a topographic survey and location of all building features in the immediate area of the construction and access road. Survey will be performed by Shive-Hattery.
- 2.2.6 Site Assessment/Permitting – The project team will contact representatives of key local and state permitting agencies to determine requirements for approval of construction including the local architectural review board and the Illinois Historic Preservation Agency. Aerial and conceptual site layouts utilizing survey information will be developed for sharing with those agencies. Project team will attend one meeting with the local building department to discuss the layout of the facility and required permits and approvals. The scope of work does not include services for an environmental impact study if one is determined to be required.
- 2.2.7 Code Review – A code review will be conducted to determine the design requirements of the new Facility and also take into consideration the required external finish of the building based on the local architectural review board.
- 2.2.8 Electrical Evaluation – The project team will evaluate options to power the new Filtration Facility. Electrical modifications will be evaluated and a recommendation will be provided as part of this task.
- 2.2.9 “Non-Process” Facility Discussions and Decisions – As part of this task, a review meeting with City staff will be scheduled to discuss the “non-process” related areas/rooms that need to be

included in the new Filtration Facility. As part of this meeting, the project team will also discuss critical decisions related to architectural, HVAC, and other building features and preferences.

Deliverables

- Geotechnical Report
- Survey of the Area Impacted by this Project
- Technical Memorandum for Required Electrical Improvements
- Technical Memorandum for Required Permits and Approvals

Meetings

- Filtration Facility Building Preferences and Features
- Meeting with Local Architectural Review Board

Task 2.3 – Development of 10% Concept Memorandum and Review Meeting

Subtasks

- 2.3.1 Develop a 10% level Concept Memorandum that includes confirmation of the 2013 Facility Plan Report and also document the results of the field investigations. This Memorandum will include the following components:
- Design criteria for the new Filtration Facility
 - Layouts of new Filtration Facility (plan and section)
 - Preliminary Process and Instrumentation Diagrams (P&IDs) for the filters, and key pumping systems
 - Hydraulic profiles for filtrate water, backwash, and backwash waste
 - Preliminary findings related to electrical requirements
 - Preliminary findings related to structural and geotechnical design
 - Summary of architectural code review requirements
 - One line diagram
 - One Site/civil plan
- 2.3.2 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the Memorandum.
- 2.3.3 Complete process calculations for the design of the Filtration Facility including sizing of the filtrate pumping system; backwash system; backwash waste, drain; air scour; process piping; and other required calculations.

- 2.3.4 Evaluate up to three filter underdrain manufacturers and systems as applicable to this project. The evaluation will be discussed with the City at the 10% review workshop.

Deliverables

- 10% Concept Memorandum

Meetings

- Meeting with City staff to discuss the Memorandum

Task 2.4 – Development of 30% Design Documents

Subtasks

- 2.4.1 Based on the Task 2 findings, 30% design documents will be prepared by the project team that would include the following:
- Documentation of final design criteria for the Facility
 - P&IDs for all process components
 - Upper level and lower level plan view of the proposed Facility
 - Two section views of the proposed Facility
 - One site plan
 - One yard piping plan
 - One electrical diagram
- 2.4.2 Plan, schedule, facilitate, and document the results of a design review workshop with the City.
- 2.4.3 Development of a MOPO (Maintenance of Plant Operations) Plan to transition from the existing filtration system to the new filtration system.
- 2.4.4 Development of an opinion of probable construction cost estimate.
- 2.4.5 Development of draft and final 30% design reports.

Deliverables

- Draft and Final 30% Design Reports

Meetings

- Meeting with City staff to discuss 30% Design Report

Task 2.5 – Development of Detailed Design Documents

This task involves the development of detailed design documents, specifically:

- 2.5.1 Develop 60% design documents (plans and specifications). Documents will be submitted electronically along with five hard copies (plans will be submitted in 11X17 format). Exhibit 1 provides a list of drawings anticipated for this project.

- 2.5.2 Prepare an architectural drawing of the Filtration Facility. Schedule and attend meetings with the City's planning commission and architectural review board to present building concepts and get their input and buy-in. Assist with obtaining approval from both boards.
- 2.5.3 Develop 90% design documents (plans and specifications). Documents will be submitted electronically along with five hard copies (plans will be submitted in 11X17 format).
- 2.5.4 Prepare an opinion of probable construction cost estimate at the 60% and 90% design milestones.
- 2.5.5 Provide 100% design documents for bidding and permitting. Documents will be submitted electronically along with five hard copies (plans will be submitted in 11X17 format).
- 2.5.6 Attend design document review meetings and prepare a summary of comments and concerns for the City's consideration (for budgeting purposes, two design document review meetings are assumed – 60% and 90%). Design review meetings or workshops can take place at CDM Smith's Chicago design center taking advantage of the presence of the design team and the visuals available to present the design concept at the critical stages of the project.
- 2.5.7 The design will include process, civil/site, structural, architectural, HVAC, plumbing, electrical and instrumentation plans and specifications.
- 2.5.8 The design documents will include contract front-end documents using standard EJCDC general conditions meeting the IEPA SRF Loan requirements.

Deliverables

- 60% Plans and Specifications
- 90% Plans and Specifications
- Final (100%) Plans and Specification – Bidding Documents

Meetings

- Meeting with City staff to discuss 60% design
- Meeting with City Staff to discuss 90% design
- Meetings with City Planning Commissions and Architectural Review Board

Task 2.6 – Bidding Services

Bidding services will include the following:

- 2.6.1 Advertise plans and specifications to contractors.
- 2.6.2 Distribute plans and specifications to potential bidders.
- 2.6.3 Lead and attend a pre-bid meeting.
- 2.6.4 Issue addenda, based on questions and input from contractors.
- 2.6.5 Review bids and make a recommendation for award.

Task 2.7 – Illinois EPA SRF Funding Support

Subtasks

- 2.7.1 Submit an IEPA SRF Loan pre-application to the IEPA based upon the current schedule and cost.
- 2.7.2 Develop an IEPA-approved SRF Loan Plan Report with the required technical information. The City will be responsible for the financial aspects of the Plan, including the existing and new rate structure modifications, and submission of the City's latest financial audit.
- 2.7.3 Coordinate with IEPA throughout the project in terms of schedule, loan requirements, etc. One review meeting with IEPA in Springfield is assumed for this Task.
- 2.7.4 Develop IEPA-approved bidding documents meeting the requirements of the American Steel and Iron Requirements and also Davis Bacon.
- 2.7.5 Attend IEPA Public Hearing at Rock Island for the Project.

Deliverables

- IEPA SRF Loan Pre-application
- IEPA SRF Loan Project Plan
- IEPA SRF Loan Bidding Requirements

Meetings

- Meeting with IEPA SRF Loan Office
- Attend IEPA Public Hearing

Task 2.8 – Assist with Permitting

Subtasks

- 2.8.1 Assist the City with obtaining the following anticipated permits:
 - Illinois EPA Drinking Water Branch Permit
 - Illinois Historic Preservation Office (IHPO) Permit
 - City of Rock Island Architectural Review Board
 - City of Rock Island Planning Commission
- 2.8.2 Plan, schedule, facilitate, and document the results of two review meetings with the IEPA Drinking Water Branch to discuss the design criteria and conceptual design at the 30% design milestone and 60% design milestone.

Deliverables

- Permit applications for IEPA and IHPO

Meetings

- Two review meetings with IEPA Drinking Water Branch

Task 2.9 – Project Management and Coordination

Subtasks

- 2.9.1 Continually assess the expectations of the City and manage the scope, schedule, and budget to meet these expectations.
- 2.9.2 Facilitate communications between Project Stakeholders.
- 2.9.3 Coordinate and manage the activities of all CDM Smith/Shive-Hattery Project Team members.
- 2.9.4 Monitor and maintain strict adherence to the established quality assurance standards.
- 2.9.5 Implement internal Technical Review of project components.
- 2.9.6 Prepare monthly status reports of Project progress, expenditures to date, cost-to-budget information, and submit in conjunction with monthly service invoice.
- 2.9.7 Prepare appropriate meeting materials as necessary to support meetings and document the results in the form of meeting summaries.
- 2.9.8 Immediately advise the City project team when established project expectations cannot be met.
- 2.9.9 Plan, schedule, facilitate, and document the results of project meetings with the City.
- 2.9.10 Hold internal weekly coordination conference calls or meetings with the Project Team.

Deliverables

- Monthly Progress Report and Service Invoices, including Scope, Schedule, and Cost-to-Budget Updates
- Meeting and Briefing Materials
- Meeting Summaries
- Schedule Update

Phase 2 Schedule

We anticipate completion of the design within 15 months of the Notice to Proceed (NTP), including City review time as follows:

- Two months for 10% design after NTP;
- Three months for 30% design after approval of 10% design;
- Three months for 60% design after approval of 30% design;
- Three months for 90% design after approval of 60% design;

- Two months for 100% design after approval of 90% design; and
- Three months for bidding.

Phase 2 Fee

Exhibit 2 provides a summary of the level of effort for the Phase 2 Project scope tasks. The lump sum fee is \$1,749,513. This will be billed on a percent completion at each milestone.

Phase 2 Responsibilities of the City

The following activities shall be the responsibility of the City:

- a. Identify a Project Representative with full authority to act on behalf of the City with respect to this project. The Project Representative shall render decisions in a timely manner in order to avoid project delays.
- b. The City will provide the most recent financial audit for the IEPA SRF Loan and rate structure impacts as a result of this project and other recent improvements implemented by the City.
- c. The City will provide water system information requested by the IEPA for approval of the Project Plan.
- d. Legal, accounting, and insurance counseling services or other consultants that may be necessary. The City shall coordinate these services with those provided by CDM Smith.
- e. Provide to CDM Smith any available drawings, CADD files, survey plats, testing data, geotechnical data, environmental or hazardous materials evaluations, and reports from previous studies/evaluations for the water plant.
- f. The City will attend design review meetings and will review design milestone documents. It is assumed that the City will have a 2-week review time each design milestone.
- g. The City shall furnish tests, inspections, permits and reports including but not limited to hazardous materials, structural, mechanical, chemical, air pollution and water pollution tests.

Phase 2 Assumptions

- Programming and system integration of the Filtration Facility with the Plant's SCADA system will be performed by the City's system integrator under a separate agreement.
- The existing Residuals Backwash Recovery Basin is adequate and does not require improvements as part of this Project.
- A pumping system is not required for backwash waste and filter-to-waste.
- The existing Filtration Building will be left as is and no improvements or re-purposing is assumed under this Project.
- Design of back-up power supply is not included in the scope of work.

- The scope of work and fee is based on the design concept provided in Phase I - Study (drawings/layouts attached).
- The scope of work does not include security/card access/CCTV/page party systems for the new Filtration Facility.
- Permit fees are not included in the Fee.
- Potholing of existing underground utilities is not included in the scope of work or fee. It is assumed that potholing where required, will be completed by City crews or a City hired contractor.
- Shoring and bracing design for protection of existing structures is not included.
- Construction phase services are not included in this scope of work and will be completed at the next phase of the Project.
- The scope of work and fee are based on reinforced concrete mat foundation and spread footing foundations for the new Filtration Facility. It is assumed that deep foundations will not be required.
- It is assumed that the existing structures, including Backwash Recovery Basin, Backwash Elevated Tank, Superpulsator Building, and Domes, can structurally support the proposed improvements under this Project and will not require any structural modifications beyond the proposed piping connections.

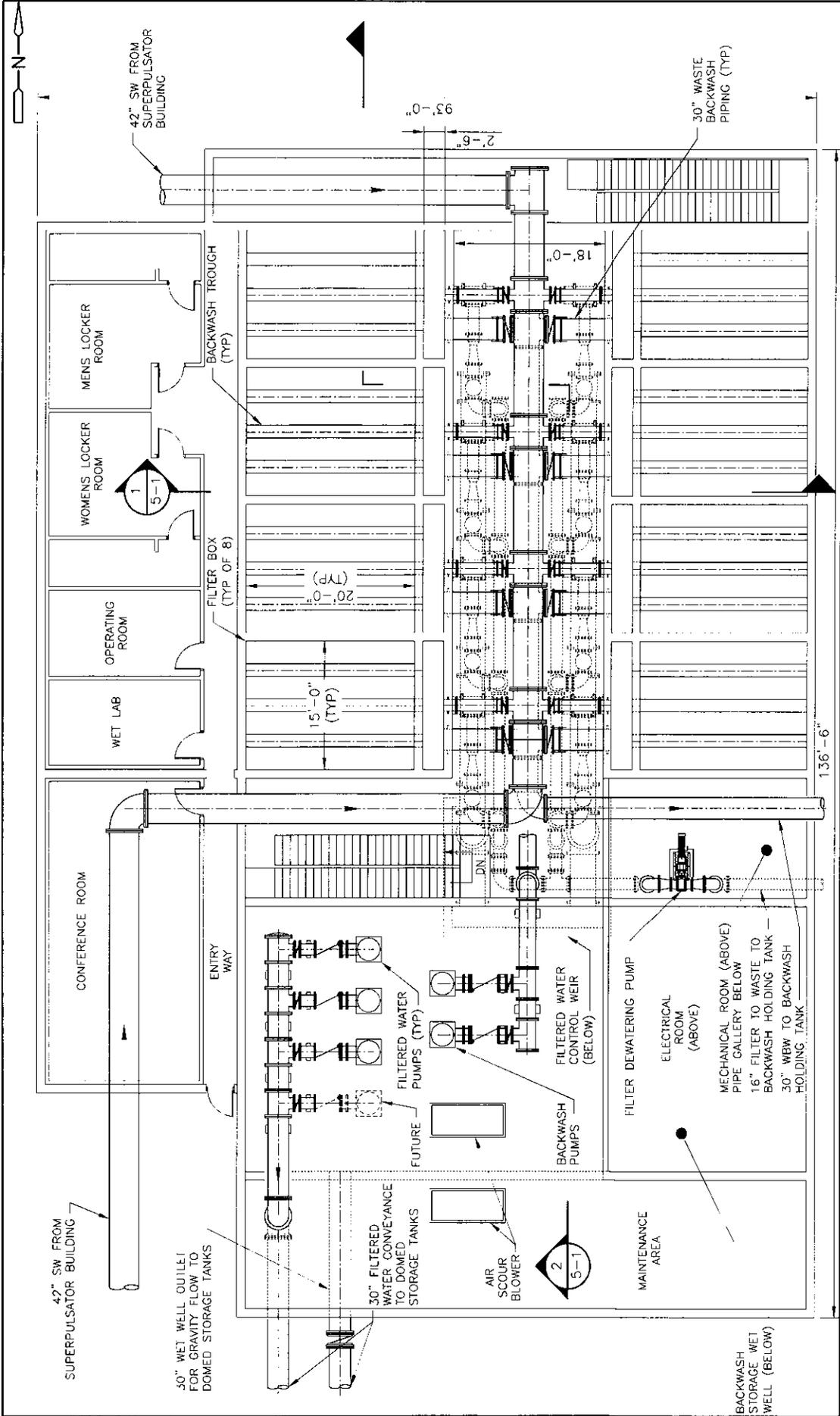


FIGURE 4-1
 ALTERNATIVE 2 - GRAVITY FILTRATION
 LAYOUT PLAN
 ROCK ISLAND WTP
 JULY 2013



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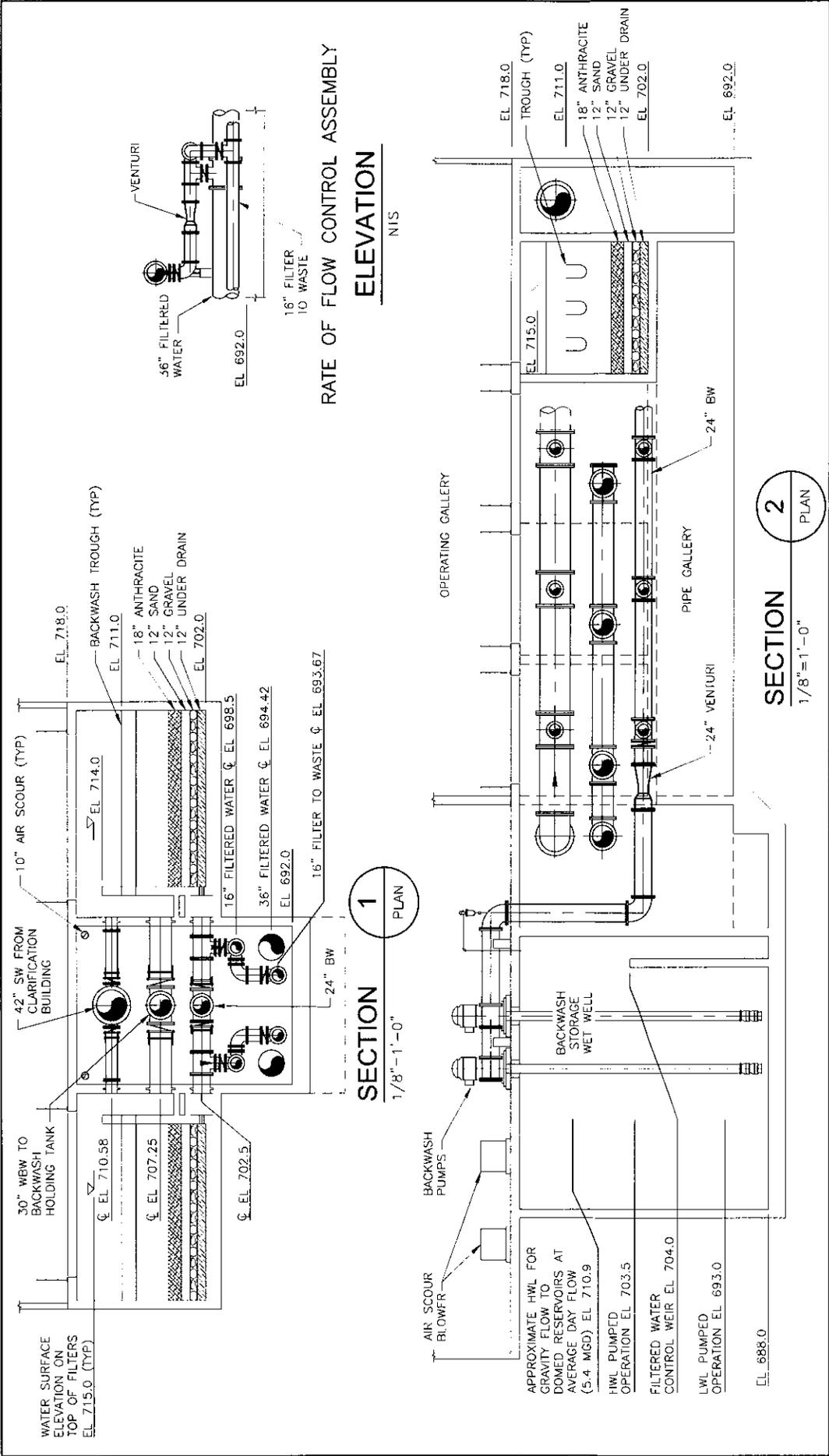


FIGURE 5-1
 ALTERNATIVE 2 - GRAVITY FILTRATION
 LAYOUT SECTIONS
 ROCK ISLAND WTP
 JULY 2013



NOT TO SCALE. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

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**City of Rock Island
Water Treatment Plant Filtration Facility Design and Bidding Fee
Phase 2 (Design and Bidding) Project Tasks
Exhibit 2 - Summary of Fee**

Task	Description	CDM Smith Hours	CDM Smith Fee	Shive Hattery Fee	Direct Costs
2.1	Kickoff Meeting and Development of Project Plan	252	\$42,907		\$2,500
2.2	Conduct "Design Related" Field Activities and Investigations	735	\$110,864		\$11,150
2.3	Development of 10% Concept Memo & Review Meeting	1,273	\$192,137		\$1,500
2.4	Development of 30% Design Documents	1,040	\$171,693		\$6,000
2.5	Development of Detailed Design Documents	4,192	\$610,513		\$19,500
2.6	Bidding Services	392	\$53,595		\$3,250
2.7	Illinois EPA SRF Funding Support	306	\$44,944		\$3,000
2.8	Assist with Permitting	184	\$28,637		\$3,000
2.9	Project Management & Coordination	628	\$97,923		\$4,000
	TOTALS	9,002	\$1,353,213	\$342,400	\$53,900
	PROJECT TOTAL ENGINEERING FEE		\$1,353,213	\$342,400	\$1,749,513

City of Rock Island
 Water Treatment Plant Filtration Facility Design and Bidding Fee
 Phase 2 (Design and Bidding) Project Tasks
 Exhibit 2 - CDM Smith Breakdown

Task	Description	Project Team Members														Hours	Labor Dollars	Sweat Dollars	Direct Costs	
		Project Design Manager/Director	Project Manager	Senior Process Engineer	Process Engineer	Civil Engineer	Electrical Engineer	Automation Engineer	Geotechnical Engineer	Structure	M&E & Piping/Control	Architectural/MEP	Cost Estimator	Process Designer	Design/Detail/Coordination					Admin
	Hourly Billing Rate	\$224	\$188	\$214	\$120	\$138	\$132	\$132	\$138	\$142	\$156	\$188	\$174	\$226	\$142	\$78	\$252			
2.1	Kickoff Meeting and Development of Project Plan																			
	Kickoff Workshop and Preparation	8	16	8	8	8	8	8	8	2	2				4			80	\$1,854.52	\$1,500
	Workshop Summary	8													4			32	\$1,827.00	
	Development of Project Plan and Quality Plan	24	40	8	8	4	8	8	8	4	4			24	8	16		160	\$28,221.76	\$1,000
	Subtotal Hours	40	64	16	16	12	16	16	16	0	6	0	0	24	16	16		224		
	Subtotal Dollars	\$7,152	\$12,096	\$3,424	\$1,936	\$1,656	\$2,112	\$2,112	\$2,112	\$0	\$858	\$1,056	\$0	\$5,424	\$1,360	\$4,064		\$49,907	\$3,500	
2.2	Conduct "Design Related" Field Activities and Investigations																			
	Gather/Assemble/Review Existing Information	2	8	4	16			8		4					4			46	\$6,671.70	\$500
	Site Visits by Project Team	8			8	8	11	8		8								51	\$7,328.81	\$2,500
	Process Confirmation	16	32	40	40								16					144	\$27,738.60	
	Geotechnical Evaluation	4	8						60	16								88	\$14,124.60	\$7,150
	Structural Evaluation	8							72									80	\$11,718.00	\$2,000
	Site Survey (Survey by SM)	12				16												36	\$2,337.60	
	Environmental Site Assessment/Permitting	12				48									4			56	\$8,139.60	
	Code Review	4	8			4				2	2							24	\$4,184.40	
	Final Evaluation	16				80												82	\$10,947.00	
	Review Meeting/Prepare Summary Document	4	16	16						8	4				4			56	\$8,982.00	\$2,000
	Non-Process Facility Discussions and Decisions	4	12			24	24	24	24	4	4							82	\$13,671.00	
	Subtotal Hours	80	96	44	80	60	117	60	132	7	10	0	16	0	11	0		725		
	Subtotal Dollars	\$17,920	\$17,760	\$9,424	\$9,876	\$8,448	\$16,800	\$15,264	\$18,711	\$103	\$1,800	\$0	\$4,320	\$0	\$465	\$0		\$110,804	\$11,150	
2.3	Development of 10% Concept Memo & Review Meeting																			
	Develop 10% Level Concept Memo	8	40	8	24	16	16	16	80	4	12				8	8	40	280	\$46,473.84	
	Participate/Assemble/Document Results from City Meeting	8	8	8	8	8	8	8	8						4			51	\$8,404.30	\$1,500
	Complete Process Calculations for Design of Filtration Facility	24	12	75	240	24												375	\$55,792.50	
	Developing On-Site Safety Backwash Filtrate and Air Short	24	12	60	220			126					143					443	\$69,151.42	
	Evaluate Three Filter Underdrain Manufacturers	12	4	8	60													84	\$12,335.43	
	Subtotal Hours	76	76	157	432	60	24	150	0	80	16	12	0	160	4	11	40	523		
	Subtotal Dollars	\$16,976	\$14,384	\$34,064	\$54,104	\$5,552	\$3,176	\$19,824	\$0	\$11,360	\$632	\$2,268	\$0	\$17,640	\$1,134	\$465	\$10,280	\$192,137	\$1,300	
2.4	Development of 30% Design Documents																			
	Prepare 30% Design Documents	16	40	24	24	16	20	80			12			80	24	6	60	404	\$66,104.84	\$1,500
	Participate/Assemble/Document Results from Review Workshop	12	16	8	8	8	8	8	8									76	\$12,741.12	\$1,500
	Development of M&E/Pan	8	40	23	4	4	4	4	8						8			80	\$12,542.40	
	Development of Construction Cost Estimate	4	8	4	4	4	4	4	4				80					378	\$22,328.40	
	Development of Draft 30% Design Reports	24	32	60	120	24	24	24	24	4					6			384	\$47,877.84	\$3,000
	Subtotal Hours	64	136	120	160	56	56	120	0	36	4	12	80	80	26	16	76	1040		
	Subtotal Dollars	\$14,314	\$25,784	\$25,704	\$19,152	\$7,376	\$7,460	\$15,872	\$0	\$5,160	\$630	\$2,268	\$13,600	\$10,080	\$3,402	\$1,260	\$18,132	\$171,408	\$4,000	
2.5	Development of Detailed Design Documents																			
	Develop 60% Design Documents	43	24	32	124	160	192	192		222	20	16		300	40	8	60	1430	\$205,071.30	\$5,000
	Prepare Architectural Drawing of Filtration Facility	43	4	32	124	160	192	192		16				300	20		40	1430	\$6,615.00	
	Develop 60% Design Documents	43	24	32	124	160	192	192		220	20	8		300	40	8	60	1310	\$190,458.30	\$5,000
	Prepare Construction Cost Estimate at 60% & 90%	16	16	8	8	8	16	16					110	300				208	\$35,408.32	
	Provide 100% Design Documents for Bidding & Permitting	16	16	24	60	24	80	60		80	8	4		82	8	40	500	\$74,927.14	\$3,000	
	Prepare 90, 95, & 100% Deliverables	17			24									24	24		84	\$10,054.80		
	Attend Design Document Review Meetings & Prepare Summary Assumptions	24	40	24	40	8	32	32		12					16			248	\$38,230.32	\$4,500
	Develop Discipline Plans & Specifications & Deliverables	24	24	8	24	16	60	60		40								242	\$33,521.24	
	Design Documents (Front-End Docs (E&C & EPA S&F Loans))	8	12		60													114	\$18,279.20	
	Subtotal Hours	144	192	128	464	296	580	520	0	404	48	44	120	704	100	88	160	4192		
	Subtotal Dollars	\$32,208	\$36,288	\$27,418	\$55,841	\$41,118	\$76,734	\$68,796	\$0	\$85,417	\$7,560	\$8,316	\$70,780	\$88,704	\$14,376	\$6,930	\$40,338	\$610,513	\$19,500	
2.6	Bidding Services																			
	Advertise Plans & Specifications to Contractors	8			16													32	\$4,097.28	
	Distribute Plans & Specifications to Potential Bidders	12			24													48	\$7,583.84	\$1,000
	Less & Attend Pre-Bid Meetings	12			12													48	\$4,968.48	\$750
	Issue Addenda Based On Questions & Input from Contractors	8	16	8	40	24	24	40		24					4	8		244	\$35,400.96	
	Review Bids & Make Recommendation for Award	8													2			30	\$1,669.56	
	Subtotal Hours	8	64	8	92	24	24	40	0	24	0	0	0	40	0	80	0	392		
	Subtotal Dollars	\$1,792	\$12,096	\$1,714	\$11,012	\$3,334	\$3,376	\$5,280	\$0	\$4,402	\$0	\$0	\$0	\$5,040	\$0	\$4,725	\$1,016	\$53,074	\$8,250	
2.7	Illinois EPA S&F Funding Support																			
	Submit EPA S&F Loan Pre-application	2			4													6	\$836.80	
	Develop EPA Approved S&F Loan Plans Report	16			24	24									12			76	\$10,175.76	
	Coordinate a 1st EPA "Throughput" Project Schedule Meeting	40			8	40									12			102	\$15,019.20	\$2,000
	Attend Public Hearing	8			8										8			24	\$3,099.60	\$1,000
	Develop EPA Approved Bidding Documents (Loan Forms)	8	24	16	24	16									12			102	\$15,792.80	
	Subtotal Hours	80	32	24	88	80	0	0	0	0	0	0	0	0	44	0	0	306	\$44,944	\$3,000
	Subtotal Dollars	\$1,792	\$17,010	\$3,427	\$8,140	\$11,118	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,465	\$0		\$44,944	\$3,000	
2.8	Assist with Permitting																			
	Assist City with Obtaining Permits (EPA, City, S&F)	8	32		40	32												124	\$18,015.48	\$1,000
	Participate/Assemble/Document Results from EPA Meetings	24	24															12	\$10,621.80	\$3,000
	Subtotal Hours	8	56	24	40	32	0	0	0	0	0	0	0	0	24	0		184		
	Subtotal Dollars	\$1,792	\$10,584	\$5,141	\$4,768	\$4,424	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,896	\$0		\$38,437	\$3,000	
2.9	Project Management & Coordination																			
	Project Management and Coordination	8	104		24													160	\$26,268.00	
	Internal Communication with Project Team (CDM & SM) - Assume	20	52	8	26	26	26	26		26					12			256	\$44,832.00	
	Monitor and Maintain Schedule	8																32	\$10,784.16	
	Prepare Monthly Status Reports (Assume 12)	8																48	\$8,424.00	\$1,000
	Participate/Assemble/Document Results from City Meetings (Assume 5)	48																80	\$10,174.56	\$3,000
	Subtotal Hours	48	160																	