

**Memorandum
Public Works Department**



To: City Manager
Subject: Water Treatment Plant Filter Design Study,
Project 2704
Date: November 14, 2012
Number: 2012-262

Attached is a proposed agreement for professional services with CDM Smith, Inc. for engineering design services on the Water Treatment Plant Filter Design Study.

The Engineering Division solicited qualifications from engineering firms for the filter design study to review options and provide a cost estimate for budget preparation. CDM Smith, Inc. was selected and approved by the City Council at their August 13, 2012 meeting.

CDM Smith, Inc. proposes to provide their engineering services at an estimated total cost of \$75,000.

Recommendation

The Public Works Department recommends that the City Council approve the agreement for professional services with CDM Smith, Inc. at a total estimated fee of \$75,000 and that the City Manager be authorized to sign the agreement on behalf of the City of Rock Island.

Submitted by: Robert T. Hawes, P.E., Assistant City Manager/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 November _____, 2012 between City of Rock Island, Illinois ("OWNER") and CDM Smith Inc. ("ENGINEER").

OWNER intends to study water treatment plant filtration upgrades to the facility located within Rock Island, Illinois (the "Project").

OWNER and ENGINEER in consideration of their mutual covenants herein agree in respect of the performance or furnishing of services by ENGINEER with respect 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 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 The specific time period for the performance of ENGINEER's Services are set forth in Exhibit A.
- 2.2 If the specific periods of time for rendering services or specific dates by which services are to be completed are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance and compensation for ENGINEER's services shall be adjusted equitably.
- 2.3 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 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 and the fact that the time for performance under this Agreement has been revised

ARTICLE 3 – OWNER'S RESPONSIBILITIES

OWNER shall do the following in a timely manner so as not to delay the services of ENGINEER and shall bear all costs incident thereto:

- 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 Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the Project including previous reports and, as applicable to the Services, any other data relative to design or construction of the Project, all of which ENGINEER shall be entitled to rely upon.
- 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 defect or non conformance in ENGINEER's Services or in the work of any Contractor.
- 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.
 - 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. Invoices are due and payable on receipt.
 - 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.
- 5.2 Opinions of Probable Construction Cost

ENGINEER's opinions of probable Construction Cost, as applicable to the Services, provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional engineer generally familiar with the construction industry. However, since ENGINEER has no control over the cost of labor, materials,

equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, or when the Project will be constructed 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 wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator.

5.3 Termination

The obligation to provide further services under this Agreement may be terminated by either party upon thirty days' written notice in the event of substantial failure by the other party to perform in accordance with the terms thereof through no fault of the terminating party. In the event of any termination, ENGINEER will be paid for all services rendered and reimbursable expenses incurred to the date of termination and, in addition, all reimbursable expenses directly attributable to termination.

5.4 Use of Documents

5.4.1 All Documents are instruments of service in respect to this Project, 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.

5.4.2 OWNER may rely upon that data or information set forth on paper (also known as hard copies) that the OWNER receives from the ENGINEER by mail, hand delivery, or facsimile, are the items that the ENGINEER intended to send. Files in electronic media format of text, data, graphics, or other types that are furnished by the ENGINEER to the OWNER are furnished only for convenience, not reliance by the OWNER. Any conclusion or information obtained or derived from such electronic files will be at the OWNER's sole risk. In all cases, the original hard copy of the documents takes precedence over the electronic files.

5.4.3 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the OWNER agrees that it will perform acceptance tests or procedures within 60 days, after which the OWNER shall be deemed to have accepted the data thus transferred. Any transmittal errors detected within the 60-day acceptance period will be corrected by the ENGINEER.

5.4.4 When transferring documents in electronic media format, the ENGINEER makes no representations as to long-term compatibility, usability, or readability of such documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the ENGINEER.

5.4.5 OWNER may make and retain copies of documents for information and reference in connection with use on the Project by OWNER. ENGINEER grants OWNER a license to use the Documents on the Project, extensions of the Project, and other projects 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.

5.4.6 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.

5.5 Controlling Law

This Agreement is to be governed by the law of the principal place of business of ENGINEER.

5.6 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.

5.7 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.

5.8 Successors and Assigns

5.8.1. 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 5.8.2 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.

5.8.2. 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.

5.8.3. Unless expressly provided otherwise in this Agreement:

5.8.3.1. Nothing in this Agreement shall be construed to create, impose or give rise to any duty owed by ENGINEER to any Contractor, Subcontractor, Supplier, 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.

5.8.3.2. 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.

5.9 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.

5.10 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.

5.11 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.

5.12 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.

- 5.13 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.
- 5.14 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.
- 5.15 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.
- 5.16 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.
- 5.17 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.
- 5.18 Headings
The headings used in this Agreement are for general reference only and do not have special significance.
- 5.19 Subcontractors
ENGINEER may utilize such ENGINEER's Subcontractors as ENGINEER deems necessary to assist in the performance of its Services.
- 5.20 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.

5.21 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.

5.22 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

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

6.1.1 Services

The services to be performed for or furnished to OWNER by ENGINEER described in this Agreement.

6.1.2 Agreement

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

6.1.3 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.

6.1.4 Construction Cost – ♦

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.

6.1.5 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.

6.1.6 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.

6.1.7 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.

6.1.8 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.

6.1.9 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").

6.1.10 Standard General Conditions - ♦

The Standard General Conditions of the Construction Contract (No. C-700) of the Engineers Joint Contract Documents Committee.

6.1.11 Total Project Costs - ♦

The sum of the Construction Cost, allowances for contingencies, the total costs of design 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

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

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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.

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 – CDM Smith’s Scope of Work dated November 06, 2012.

This Agreement (consisting of Pages 1 to 9 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:

ENGINEER:

By: Christopher M. Martel, P.E., BCEE

By: _____

Title: Associate

Title: _____

Date: _____

Date: _____

Address for giving notices:
125 South Wacker Drive
Suite 600
Chicago, Illinois 60606

Address for giving notices:

**EXHIBIT A
TO AGREEMENT BETWEEN
OWNER AND ENGINEER
(STUDY, REPORT AND DESIGN SERVICES)
Phase 1 – Water Plant Filtration Study**

This is an exhibit attached to and made a part of the Agreement dated November __, 2012, between City of Rock Island, Illinois (OWNER) and CDM Smith Inc. (ENGINEER) for professional services.

1.0 ENGINEER'S SERVICES

1.1 Study and Report Phase

Upon this Agreement becoming effective, ENGINEER shall:

- 1.1.1 Consult with OWNER to clarify and define OWNER's requirements for the Project and review available data.
- 1.1.2 Advise OWNER as to the necessity of OWNER's providing or obtaining from others data or services which are not part of ENGINEER's Services, and assist OWNER in obtaining such data and services.
- 1.1.3 Identify and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project specified by ENGINEER with whom consultation is to be undertaken in connection with the Project.
- 1.1.4 Evaluate various alternate solutions available to OWNER as described herein, and, after consultation with OWNER, recommend to OWNER those solutions which in ENGINEER's judgment best meet OWNER's requirements for the Project.
- 1.1.5 Prepare a report (the "Report") which will contain the statement of OWNER's requirements for the Project and, as appropriate, will contain schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate the considerations involved and those alternate solutions available to OWNER which ENGINEER recommends. This Report will be accompanied by ENGINEER's opinion of Total Project Costs for each solution which is so recommended for the Project, including the following: opinion of probable Construction Cost, allowances for contingencies including costs of design professional and related services based on information furnished by OWNER for allowances and other items and services included within the definition of Total Project Costs.
- 1.1.6 Furnish the Report to and review it with OWNER.
- 1.1.7 Revise the Report in response to OWNER's comments, as appropriate, and furnish final copies of the Report in the number set forth herein.
- 1.1.8 Submit the Report within the stipulated period indicated herein.

- 1.1.9 ENGINEER's Services under the Study and Report Phase will be considered complete at the earlier of (1) the date when the Report has been accepted by OWNER or (2) thirty days after the date when such Report is 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 review the portions of the Project specified by ENGINEER, if such approval is to be obtained during the Study and Report Phase.

The duties and responsibilities of ENGINEER during the Study and Report Phase as set forth in this paragraph 1.1 are amended and supplemented as follows:

As detailed in Exhibit B, Scope of Work.

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 sixteen-division format 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:

N/A

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 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 1.0.

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 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.
- 2.3 Provide, as may be required for the Project:
 - 2.3.1 Accounting, bond and financial advisory, independent cost estimating and insurance counseling services;
 - 2.3.2 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
 - 2.3.3 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.
- 2.4 Provide labor and safety equipment to open and protect manholes and/or to operate valves and hydrants as required by the ENGINEER.
- 2.5 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.
- 2.6 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.

- 2.7 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.
- 2.8 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.
- 2.9 Bear all costs incident to compliance with the requirements of the OWNER's Responsibilities.

The OWNER's responsibilities as set forth in this paragraph 2.0 are amended and supplemented as follows:

As detailed in Exhibit B, Scope of Work.

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 City of Rock Island has elected to proceed with Phase 1 (Water Plant Filtration Facility Plan) only. Phase 1 shall be completed per Attachment 1 of 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:

The City of Rock Island has elected to proceed with Phase 1 (Water Plant Filtration Facility Plan) only. Phase 1 shall be completed for a not-to-exceed lump sum fee of \$75,000. The project shall be billed on a monthly basis, based on the actual tasks completed during the billing period. Summary of tasks and fees for Phase 1 are provided in Exhibit B, Scope of Work.

5.0 SPECIAL PROVISIONS

The following special provisions and/or other considerations or requirements are applicable to this Agreement:

N/A

Exhibit B - CDM Smith's Scope of Services

November 06, 2012

City of Rock Island Water Plant Filtration and Water Disinfection Upgrade Project

This document is a summary of the proposed scope of work to provide professional engineering services for the City of Rock Island Water Plant Filtration and Water Disinfection Upgrade Project. The project will be broken into two phases:

Phase 1- Water Plant Filtration Facility Plan

Phase 2 - Water Plant Disinfection and Other Components Facility Plan

The City has elected to proceed with Phase 1 only at this point.

Phase 1 (Water Plant Filtration Facility Plan) Project Task Descriptions

Task 1.1 – Refine Project Goals

Subtasks:

- 1.1.1 Plan, schedule, facilitate, and document the results of a Project “Kick-off” workshop. Suggested attendees would include managers, 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. establish reliability/redundancy requirements
 - d. establish treated water quantity and quality goals
 - e. clearly define and prioritize the goals and objectives of the Project
 - f. review current and projected drinking water regulations
 - g. discuss facility issues and shortcomings
 - h. identify information and reconnaissance needs
- 1.1.2 Prepare appropriate meeting materials and document the results of the workshop in the form of a meeting summary document.

Deliverables:

- “Project Kick-off” Workshop Summary

Meetings:

- “Project Kick-off” Workshop with City staff

Task 1.2 – Survey Existing Filtration Facility

Subtasks:

1.2.1 Gather, assemble, and review information from Rock Island related to their existing water treatment processes to identify deficiencies, weaknesses, and opportunities for optimization. Components of this work will include:

- a. Conduct site visit to observe operations of the existing filtration treatment process.
- b. Visually inspect the physical condition of the existing filtration treatment plant components.
- c. Evaluate the hydraulic profile of the existing water treatment plant facilities from the influent to the rapid mix basins to the effluent from the finished water reservoirs by calculating theoretical headloss.
- d. Collect and review historical operation and maintenance data, including: raw and treated water quality, chemical use, flow rates, O&M activities
- e. Review historical data for compliance with current and projected future regulations and industry guidelines.
- f. Review the existing filtration facility to identify concerns related to:
 - operations and maintenance
 - architecture / building code compliance
 - structural integrity
 - HVAC systems
 - electrical systems
 - instrumentation systems
 - historic preservation

1.2.2 Prepare technical memorandum that summarizes results from the survey of existing filtration facility.

Deliverables:

- Existing Conditions Technical Memorandum
- Hydraulic profile drawing for the Rock Island WTP treatment process from the rapid mix basins to the clearwells.

Our understanding is that the City is not currently requesting assistance with the following optional scope of work items are for this Project:

- a. Finished water reservoir structural inspection
- b. Evaluation of raw water supply and pumping systems
- c. Evaluation of finished water pumping system
- d. Evaluation of surge control facilities
- e. Tracer studies for the evaluation of finished water storage reservoirs
- f. Evaluation of shop and maintenance facilities
- g. Evaluation of offices and laboratory facilities
- h. Evaluation of risk management plans
- i. Evaluation of distribution water quality
- j. Environmental assessment of the existing facilities, including lead, asbestos, and other hazardous materials
- k. Evaluation of existing site grading and drainage,
- l. Evaluation of underground utilities
- m. Evaluation of wholesale and retail water rate structures.

Task 1.3 – Filter Alternatives Development

Subtasks:

- 1.3.1 Develop a summary that lists a range of potential filtration improvements that could meet the Project goals. Identify at least three filtration options for further development, based upon their perceived ability to cost – effectively meet the needs of the City.
- 1.3.2 Develop a conceptual-level design of the selected alternatives based upon similar CDM Smith projects and industry standards, including:
 - a. Preliminary design criteria
 - b. Plan-view layouts of the filtration alternatives showing the locations of major equipment
 - c. Summary of major operational procedures
 - d. Examples of water treatment systems using similar filtration technology
 - e. Conceptual-level construction and O&M costs
- 1.3.3 Conduct a benefit-cost evaluation to compare the selected alternatives based upon a qualitative assessment of their ability to meet the Project goals of the City established under Task 1.1 along with conceptual level construction and O&M cost information. These goals may include some or all of the following, as well as other considerations:
 - a. Ability to meet / exceed the City’s water quality goals
 - b. Flexibility, redundancy, reliability
 - c. Safety
 - d. Adaptability to upstream and downstream treatment processes

- e. O&M concerns
 - f. Efficiency / sustainability
 - g. Financial consideration
 - h. Risk management concerns
 - i. Ease of future expansion
 - j. Constructability
 - k. Time to implement and construct
 - l. Maintaining operations during construction
 - m. Need for pilot testing
 - n. Site layout and land use requirements
 - o. Impact to historical preservation / repurposing
- 1.3.4 Prepare technical memorandum that summarizes results from the filter alternatives evaluation and recommends an alternative for implementation.
- 1.3.5 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the results from the filtration evaluation.

Deliverables:

- Summary of Potential Filtration Improvements
- Filtration Alternatives Evaluation Technical Memorandum

Meetings:

- Meeting with City staff to discuss the results of the filter alternatives investigation

Task 1.4 – Develop Conceptual Design Report

Subtasks:

- 1.4.1 Develop a Conceptual Design Report that summarizes the recommended implementation plan for the filter improvements. The conceptual design report will include the following:
- a. Conceptual (5 percent completion-level) design of the recommended alternatives for filtration improvements. Drawings to be completed for this task include the following:
 - an overall site plan
 - upper-level filter plan
 - lower level filter plan
 - preliminary schematic of treatment process
 - b. A summary of recommended pilot and bench testing, if applicable
 - c. An implementation plan that summarizes how the recommended improvements could be integrated into the existing water treatment facilities with minimal interruption to plant operation
 - d. A preliminary Project implementation schedule

- e. A conceptual-level opinion of the probable cost of the recommended process utilizing input from CDM Smith’s construction subsidiary, CDM Constructors Inc. (CCI)

1.4.2 Prepare draft Conceptual Design Report.

1.4.3 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the draft Conceptual Design Report.

1.4.4 Incorporate comments from the City into a final Conceptual Design Report.

Deliverables:

- Draft Conceptual Design Report
- Final Conceptual Design Report

Meetings:

- Meeting with City staff to discuss the draft Conceptual Design Report
- Meeting with the City Council to present the results from the Final Conceptual design Report

Task 1.5 – Project Management

Subtasks:

1.5.1 Continually assess the expectations of the City and manage the scope, schedule, and budget to meet these expectations.

1.5.2 Facilitate communications between Project Stakeholders.

1.5.3 Coordinate and manage the activities of all CDM Smith/Shive-Hattery Project Team members.

1.5.4 Monitor and maintain adherence to the established quality assurance standards.

1.5.5 Implement internal Technical Review of project components.

1.5.6 Prepare monthly status reports of Project progress, expenditures to date, cost-to-budget information, and submit in conjunction with monthly service invoice.

1.5.7 Prepare appropriate meeting materials as necessary to support meetings and document the results in the form of meeting summaries.

1.5.8 Immediately advise the City project team when established project expectations cannot be met.

1.5.9 Plan, schedule, facilitate, and document the results of project meetings with the City.

Deliverables:

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

Phase 1 Schedule

Attachment 1 provides a project schedule. We anticipate completion within five (5) months of the Notice to Proceed (NTP).

Phase 1 Fee

The below table provides a summary of the level of effort for the Phase 1 (Filtration Facility Plan) project scope tasks. The total not-to-exceed fee is \$75,000.

Phase 1 Task	Scope Level of Effort	
	Hours	Fee
1.1 Refine Project Goals/Kickoff Meeting	17	\$2,700
1.2 Survey Existing Filtration Facility	141	\$21,700
1.3 Filter Alternatives Development	163	\$22,600
1.4 Develop Conceptual Design Report	168	\$23,100
1.5 Project Management and Coordination	38	\$4,900
Scope of Work Hours and Fee	527	\$75,000

Phase II Other Water Plant Components Facility Plan) Project Task Descriptions

Task 2.1 – Survey Existing Facilities Other Than Filters

Subtasks:

- 2.1.1 Gather, assemble, and review information from Rock Island related to other existing water treatment processes to identify deficiencies, weaknesses, and opportunities for optimization.
- 2.1.2 Review the other existing facilities to identify concerns related to:
 - operations and maintenance
 - architecture / building code compliance
 - structural integrity
 - HVAC systems
 - electrical systems
 - instrumentation systems
 - site security
 - historic preservation
- 2.1.3 Identify potential reliability and redundancy needs
- 2.1.4 Identify power supply concerns
- 2.1.5 Prepare technical memorandum that summarizes results from the survey of other existing facilities at the Plant, including disinfection facility.

Deliverables:

- Other Existing Plant Components Conditions Technical Memorandum

Task 2.2 – Disinfection Alternatives Development

Subtasks:

- 2.2.1 Develop a summary that lists a range of potential disinfection improvements that could meet the Project goals. Identify at least three disinfection options for further development, based upon their perceived ability to cost – effectively meet the needs of the City.
- 2.2.2 Develop a summary table for the selected alternatives based upon similar CDM Smith projects and industry standards, including:
- a. Preliminary design criteria
 - b. Summary of major operational procedures
 - c. Examples of water treatment systems using similar disinfection technology
 - d. Conceptual-level construction and O&M costs
- 2.2.3 Conduct a benefit-cost evaluation to compare the selected alternatives based upon a qualitative assessment of their ability to meet the Project goals of the City established under Task 1.1 along with conceptual level construction and O&M cost information. These goals may include some or all of the following, as well as other considerations:
- a. Ability to meet / exceed the City's water quality goals
 - b. Flexibility, redundancy, reliability
 - c. Safety
 - d. Adaptability to upstream and downstream treatment processes
 - e. O&M concerns
 - f. Efficiency / sustainability
 - g. Financial consideration
 - h. Risk management concerns
 - i. Ease of future expansion
 - j. Constructability
 - k. Time to implement and construct
 - l. Maintaining operations during construction
 - m. Need for pilot testing
 - n. Site layout and land use requirements
 - o. Impact to historical preservation / repurposing
- 2.2.4 Prepare technical memorandum that summarizes results from the disinfection alternatives evaluation and recommends an alternative for implementation.
- 2.2.5 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the results from the disinfection evaluation.

Deliverables:

- Summary of Potential Disinfection Improvements

- Draft Disinfection Alternatives Evaluation Technical Memorandum

Meetings:

- Meeting with City staff to discuss the results of the disinfection alternatives investigation

Task 2.3 – Evaluate Other Plant Facilities**Subtasks:**

- 2.3.1 Evaluate alternatives for implementing emergency power supply for the raw water pump station, the water treatment plant, and the finished water pump station.
- 2.3.2 Evaluate alternatives for implementing a redundant finished water pipeline from the filter system to the finished water reservoirs.
- 2.3.3 Prepare technical memorandum that summarizes results from the evaluation of other plant facilities.
- 2.3.4 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the results from the evaluation of other plant facilities (with Tasks 1.3 and 1.4 Meeting)

Deliverables:

- Other Plant Facilities Technical Memorandum

Task 2.4 – Develop Conceptual Design Report for Other Plant Facilities**Subtasks:**

- 2.4.1 Develop a Conceptual Design Report that summarizes the recommended implementation plan for the other plant improvements. The conceptual design report will include the following:
 - f. Conceptual (5 percent completion-level) design of the recommended improvements. Drawings to be completed for this task include the following:
 - an overall site plan with recommended redundant finished water pipeline
 - disinfection building plan
 - disinfection system schematic
 - preliminary schematic of treatment process
 - g. A summary of recommended pilot and bench testing, if applicable
 - h. An implementation plan that summarizes how the recommended improvements could be integrated into the existing water treatment facilities with minimal interruption to plant operation
 - i. A preliminary Project implementation schedule
 - j. A conceptual-level opinion of the probable cost of the recommended process utilizing input from CDM Smith's construction subsidiary, CDM Constructors Inc. (CCI)
- 2.4.2 Prepare draft Conceptual Design Report.
- 2.4.3 Plan, schedule, facilitate, and document the results of a meeting with the City to discuss the draft Conceptual Design Report.
- 2.4.4 Incorporate comments from the City into a final Conceptual Design Report.

Deliverables:

- Draft Conceptual Design Report
- Final Conceptual Design Report

Meetings:

- Meeting with City staff to discuss the draft Conceptual Design Report
- Meeting with the City Council to present the results from the Final Conceptual design Report

Task 2.5 – Project Management

Subtasks:

- 2.5.1 Continually assess the expectations of the City and manage the scope, schedule, and budget to meet these expectations.
- 2.5.2 Facilitate communications between Project Stakeholders.
- 2.5.3 Coordinate and manage the activities of all CDM Smith/Shive-Hattery Project Team members.
- 2.5.4 Monitor and maintain strict adherence to the established quality assurance standards.
- 2.5.5 Implement internal Technical Review of project components.
- 2.5.6 Prepare monthly status reports of Project progress, expenditures to date, cost-to-budget information, and submit in conjunction with monthly service invoice.
- 2.5.7 Prepare appropriate meeting materials as necessary to support meetings and document the results in the form of meeting summaries.
- 2.5.8 Immediately advise the City project team when established project expectations cannot be met.
- 2.5.9 Plan, schedule, facilitate, and document the results of project meetings with the City.

Deliverables:

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

Phase 2 Schedule and Fee

If the City elects to proceed with Phase 1 and Phase 2 simultaneously, the project will be completed within six (6) months and the total Phase 1 and Phase 2 fee will be a not-to-exceed amount of \$130,000.

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 Client Project Representative shall render decisions in a timely manner in order to avoid project delays.
- b. Legal, accounting, and insurance counseling services or other consultants, including geotechnical, or vendors that may be necessary. The City shall coordinate these services with those services provided by CDM Smith.
- c. Provide to CDM Smith any available drawings, survey plats, testing data, geotechnical data, environmental or hazardous materials evaluations, and reports from previous studies/evaluations for the water plant. Provide historical operating and water quality data in Microsoft Excel or Access format.
- d. The City shall furnish tests, inspections, permits and reports required by law, regulation or code including but not limited to hazardous materials, structural, mechanical, chemical, air pollution and water pollution tests.

