

**MASTER SERVICES AGREEMENT
BETWEEN
OWNER AND ENGINEER**

THIS IS AN AGREEMENT made as of ^{3/4}, 2020 between Stonington, CT Water Pollution Control Authority ("OWNER") and CDM Smith Inc. ("ENGINEER").

ENGINEER's Services will be performed pursuant to individual Task Orders issued by OWNER and agreed to by ENGINEER. Such Task Orders will contain the specific scope of work ("Services"), the time schedule, charges and payment conditions, and additional terms and conditions that are applicable to such Task Orders. An example Task Order is attached hereto.

Execution of a Task Order by ENGINEER and OWNER constitutes OWNER's written authorization to ENGINEER to proceed on the date first above written with the Services described in the Task Order. This Agreement will become effective on the date first above written.

The terms and conditions of this Agreement shall apply to each Task Order, except to the extent expressly modified. When a Task Order is to modify a provision of this Agreement, the Article of this Agreement to be modified shall be specifically referenced in the Task Order and the modification shall be precisely described.

ARTICLE 1 – SCOPE OF SERVICES

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

ARTICLE 2 – TIMES FOR RENDERING SERVICES

- 2.1 The period of service of this Agreement shall be indefinite, subject to the conditions specified in Article 5.5 of this Agreement.
- 2.2 The specific time period for the performance of ENGINEER's Services will be set forth in individual Task Orders.
- 2.3 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 by OWNER, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- 2.4 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.
- 2.5 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 under a Task Order 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 proven to have been incurred by ENGINEER in connection with such delay or suspension and reactivation and the fact that the time for performance has been revised.

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 described in each Task Order, 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 Furnish to ENGINEER all existing studies, reports and other available data and services of others pertinent to the Task Order, obtain or authorize ENGINEER to obtain or provide additional reports and data as required, and furnish to ENGINEER services of others required for the performance of ENGINEER's services for a Task Order, and ENGINEER shall be entitled to use and rely upon all such information and services provided by OWNER or others in performing ENGINEER's services under a Task Order subject to any express limitations or reservations applicable to the furnished items.
- 3.5 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.
- 3.6 Provide access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under a Task Order.
- 3.7 Furnish approvals and permits from all governmental authorities having jurisdiction over the Task Order and such approvals and consents from others as may be necessary for completion of the Task Order except in those circumstances where ENGINEER's Services include assistance with obtaining such permits and/or approvals.
- 3.8 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 conformance in ENGINEER's Services or in the work of any Contractor employed by Owner on the Project.
- 3.9 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 each Task Order. The amount of any excise, VAT, or gross receipts tax that may be imposed shall be added to the compensation shown in each Task Order. 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. Invoices are due and payable within 30 days of 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, 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. 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.

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 produced under this Agreement are property of the OWNER, however ENGINEER shall retain an ownership and property interest in its pre-existing information incorporated 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 Upon receipt of full payment due and owing for all Services, ownership of the Documents transfers to the OWNER. OWNER acknowledges (1) 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; and (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.

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 \$1,000,000, 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

OWNER has disclosed to ENGINEER in writing the existence of all known and suspected Asbestos, PCBs, Petroleum, Hazardous Waste, Radioactive Material, hazardous substances, and other Constituents of Concern, as defined in Article 6, located at or near the Site, including type, quantity, and location. OWNER represents to ENGINEER that to the best of its knowledge no Constituents of Concern, other than those disclosed in writing to ENGINEER, exist at the Site.

If ENGINEER encounters an undisclosed Constituent of Concern, then ENGINEER shall notify (1) OWNER and (2) appropriate governmental officials if ENGINEER reasonably concludes that doing so is required by applicable Laws or Regulations.

It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to Constituents of Concern. 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, 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.

5.15 Insurance

ENGINEER shall procure and maintain insurance for (1) protection from claims under workers' compensation acts as required by law; (2) general liability 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 in the amount of \$1,000,000 per occurrence and \$2,000,000 aggregate; and (3) professional liability claims in the amount of \$1,000,000.

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 either party shall not constitute a default under this Agreement if such delays or failures of performance are caused by occurrences beyond the reasonable control of the party claiming delay, 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; or OWNER's failure to provide data in OWNER's possession or provide necessary comments in connection with any required reports prepared by 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 and OWNER reasonably approves 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 services, 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 Change Orders

5.24.1 Any work not contained in a Task Order shall be a change, and shall be performed by ENGINEER only pursuant to a written Change Order to this Agreement signed by OWNER and ENGINEER. Such a Change Order may increase or decrease the Work within the general scope of this Agreement. If this Change Order causes an increase or decrease in the cost of the Work, or of the time required for the performance of the Work, ENGINEER's compensation shall be adjusted in an amount acceptable to both parties in accordance with Task Order or granted an extension of the schedule, or both.

5.25 Construction Contractor's Means and Methods

ENGINEER shall have no authority over or responsibility for the means, methods, techniques, sequences, or procedures selected by the construction contractor or for safety precautions and programs incident to the work of the construction contractor.

5.26 Reporting Regulated Conditions

To the extent required by law, OWNER shall promptly report regulated conditions, including, without limitation, the discovery of releases of hazardous substances at the site to the appropriate public authorities in accordance with applicable law.

5.27 Indemnification

OWNER recognizes that any Task Order executed by ENGINEER involving Constituents of Concern, as defined in Article 6, involves legal exposure and higher risk than ENGINEER's usual engineering services.

OWNER also recognizes that ENGINEER's services are to be compensated primarily on the basis of the time ENGINEER's personnel spend in rendering services and not on basis of the exposure and risk of the work.

Therefore, OWNER and ENGINEER agree as follows:

Notwithstanding any other provision in this Agreement to the contrary, for Task Orders involving or relating to Constituents of Concern, OWNER shall indemnify, defend, and hold harmless the ENGINEER and its subcontractors, consultants, agents, officers, directors, and employees from and against all claims, damages, losses and expenses, direct and indirect, or consequential damages, including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from the performance of the work by ENGINEER (but not due to ENGINEER's fault), or claims against ENGINEER arising from the work of others, related to Constituents of Concern, as defined in Article 6.

The above indemnification provision extends to claims against ENGINEER and to damages which arise out of, are related to, or are based upon the dispersal, discharge, escape, release, threatened release, or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases, asbestos, or any other material, irritant, contaminant or pollutant in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface (a) soil, (b) water or watercourses, (c) objects, or (d) any tangible or intangible matter, whether sudden or not.

Nothing in this Article 5 shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own finally determined negligence or willful misconduct.

5.28 Status of ENGINEER

Nothing contained in this Agreement shall be construed or interpreted as requiring ENGINEER, its officers, agents, servants, or employees to assume the status of a generator, storer, treater, transporter or disposal facility as those terms appear within the Resource Conservation Recovery Act, 42USCA, Section 6901, et seq. (RCRA), or within any state statute of similar effect governing the treatment, storage, transportation or disposal of waste.

5.29 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 in the state of Connecticut. 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 Agreement

This Agreement between OWNER and ENGINEER for Professional Services including those exhibits listed in Article 6.

6.1.2 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.

6.1.3 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.

6.1.4 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.

6.1.5 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.

6.1.6 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.

6.1.7 ENGINEER's Subcontractor

A person or entity having a contract with ENGINEER to perform or furnish Services as

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

ENGINEER's independent professional subcontractor engaged directly on the Project.

6.1.8 Project

The total undertaking as described in each Task Order.

6.1.9 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 each Task Order.

6.1.10 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 the exhibit(s) of each Task Order.

6.1.11 Standard General Conditions - ♦

The Standard General Conditions of the Construction Contract (2013 Edition) of the Engineers Joint Contract Documents Committee.

6.1.12 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 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.

6.1.13 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.

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

ARTICLE 7 – EXHIBITS AND SPECIAL PROVISIONS

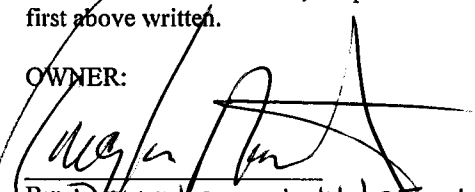
7.1 This Agreement is subject to the provisions of the following Exhibits which are attached to and made a part of the Agreement:

Exhibit A – RFQ 2019-005 – Project Approach

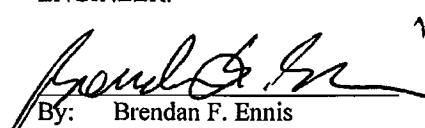
This Agreement (consisting of Pages 1 to 13 inclusive), and the Exhibits identified above constitute the entire agreement between OWNER and ENGINEER and supersede all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

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

OWNER:


By: Douglas Nettleton
Title: Director, WPCA

ENGINEER:


By: Brendan F. Ennis
Title: Client Service Leader

Address for giving notices:

Address for giving notices:
CDM Smith Inc.
260 West Exchange Street, Suite 300
Providence, RI 02903



EXHIBIT A

Section 4

Project Approach and Schedule

The Town of Stonington, on behalf of the Stonington Water Pollution and Control Authority (WPCA) has developed a request for qualifications (RFQ) for an Inflow and Infiltration (I&I) study and evaluation in the Mystic Village area serviced by the Mystic WPCA Water Pollution Control Facility (WPCF). The Mystic WPCF has exceeded 80 percent of the Mystic WPCF's average daily capacity (0.8 MG) for several months within 2019 and 2018. As a result of these exceedances, the WPCA voted in May 2019 to enact a moratorium on any future sewer connections. The WPCA is also in the process of developing plans for utilizing the previously mothballed sludge diversion pump station to convey wastewater flows from the Mystic WPCF to the Borough plant. The WPCA also developed and issued, in August 2019, a letter to ratepayers and users within the Mystic Sewer District regarding the identification of sump pumps within an amnesty period (August 15, 2019 through September 30, 2019). The WPCA has indicated that to date approximately 230 sump pumps out of approximately 1,400 users have been identified through the amnesty program.

CDM Smith understands the urgency of the WPCA's need to identify capacity reduction measures within the Mystic Sewer District in order to reduce plant exceedances and restore normal operating parameters. Also, ending the moratorium on future sewer connections is essential to the growth of the Town of Stonington's tax base, which is vital for maintaining and expanding the overall vibrancy of the Town. CDM Smith can directly help the WPCA with I/I studies, evaluation, rehabilitation programs, and optimizing plant operations, allowing for continued development within the Town.

The following approach utilizes WPCA's identified phases and tasks while incorporating additional thoughts as warranted. All items from the scope of work in the RFQ will apply. The overall intent of CDM Smith's approach, as we have successfully done in several communities throughout the State with documented results, is to provide the basis for the development of a focused comprehensive sewer rehabilitation program that will save WPCA money by ensuring that large percentages of Infiltration and Inflow (I/I) are removed by effectively targeting the "worst of the worst" parts of the sewer system.

Similar Work: *The Town of West Hartford had a problematic area, referred to as the Four Mile Road area, that contributed excessive groundwater and rainfall dependent infiltration and inflow (RDII) to the sewer system often resulting in significant sewer surcharging and sanitary sewer overflows (SSOs). For the Hartford Metropolitan District Commission (MDC), CDM Smith focused a comprehensive rehabilitation program on only 8 percent of the contributing sewershed area. The result was a reduction in infiltration and RDII by more than 25 percent from the entire sewershed. Additionally, since the project was completed in 2014 there have been no reported SSOs. The cost-effective project addressed the extraneous flow and the SSOs with a targeted comprehensive approach that saved time and money.*

Initial Tasks

Mystic Sewer District Overview

The Mystic Sewershed includes approximately 20 miles of gravity sewers, five pumping stations, and the WPCF. The Mystic WPCF, placed on-line in 1972, is located on Edgemont Street and overlooks the Mystic River. Of the 20 miles of sewers in Mystic, there are approximately 12 miles of interceptors and eight miles of lateral sewers. The sizes of the sewers in this system range from 8 inches to 30 inches in diameter. In addition, there are approximately 1.1 miles of force main ranging in size from 4 inches to 10 inches in diameter. Most of the system was constructed during the 1970s. The service area extends eastward from the Mystic plant to the intersection of U.S. Route 1 and Chapman Lane, and northward to North Stonington Road. Four of the five pumping stations collect the flow and convey it to the Mystic plant via a combination of force mains and gravity sewers. The fifth pumping station (Diversion P.S.) is located at the Mystic plant and conveys underflow from the plant's primary clarifiers to the Borough WPCF via a separate transmission main.

Collect/Existing Data and Plan

The overall Mystic Sewershed will be reviewed with the WPCA relative to operational history, pipe age, history of breaks/failures, and area believed to have high I/I. The configuration of the system in concert with problem areas will be assessed to develop a flow metering plan for optimal data capture. Working with the WPCA to understand the system history and review of the available data will determine the extent of the flow metering program needed.

Develop Implementation Schedule and Scope of Work

Prepare Clean Water Fund Application - The scope of work associated with this I/I study is eligible for 55 percent planning grant from the Connecticut Department of Energy and Environmental Protection (CT DEEP) Clean Water Fund. CDM Smith has assisted many communities across the state in preparing funding applications and obtaining grant funding. Note that the task to prepare the Clean Water Fund application is not eligible for Clean Water Funding.

Phase I - Infiltration/Inflow Analysis

1. Continuous Flow Metering

Spring 2020 Flow Metering - Given the overall size of the sewershed, approximately 105,000 linear feet, it anticipated that subareas on the order of 20,000 to 25,000 feet would be

developed. The spring 2020 flow metering program would be targeted on the overall sewershed with subareas of 20,000 to 25,000 feet. Areas known and/or determined to have high I/I would then be developed into smaller as needed subareas on the order of 10,000 linear feet. The typical rule of thumb is that 80 percent of the I/I in a sewer system can often be found in 20 to 30 percent of the sewer system. The trick is finding where that 20 to 30 percent of the system that is the highest in I/I is so that targeted field investigations and future sewer rehabilitation is spent in the right locations.

Similar Work: CDM Smith recently completed a targeted flow metering program for New Britain. Based on the prior result of a town wide flow metering program that broke the sewershed into approximately 25,000 linear foot subareas, 29 flow meters were installed in the subareas that exhibited the highest I/I to further subdivide the areas into subsystem of about 8,000 linear feet on average. The result showed that the top eight smaller subsystems contributed the approximate total I/I that the City is required to eliminate. New Britain is now focused on performing comprehensive sewer rehabilitation in those eight prioritized subareas in individual contracts over the next 10 years, with the first contract currently under construction.

2. Groundwater Gage Installation

CDM Smith will work with the WPCA to determine the optimal placement and number of groundwater gage installations required. Areas within the Mystic Sewershed already identified or believed to have high I/I shall be reviewed for overall installations. The following existing US Geological Survey (USGS) water table gages will also be reviewed and referenced for representation of the Mystic Sewershed:

- USGS New London, CT - 412013072030601-CT-GT 19 - monthly readings
- USGS North Stonington, CT - 412931071514201-CT-NSN 77 - monthly readings
- USGS North Stonington, CT - 412746071510601-CTNSN 78 - monthly readings
- USGS Westerly, RI - 412154071462901-RI-WEW 522 - daily readings.

Installations will then be evaluated in conjunction with the WPCA based overall need, ease of installation, and accessibility.

3. Rain Gage Installation

CDM Smith will work with the WPCA to determine the need, optimal placement, and number of rain gage installations required. Installations will be reviewed relative to existing

weather stations within and adjacent to Mystic Sewershed. Additional gage data, weather station data, and any data available from the Mystic plant will be evaluated based on historical data available, geographic location, and ability to assess rainfall within the Mystic Sewershed.

4. I/I Analysis Report with recommendations for SSES work

Flow Data Review and Analysis – Unless requested by the WPCA, development of a hydraulic model is not necessary. CDM Smith will use the U.S. Environmental Protection Agency (EPA) Sanitary Sewer Overflow Analysis and Planning (SSOAP) toolbox, which was developed for the EPA by CDM Smith, to evaluate the flow from each tributary area in both dry and wet weather as well as to evaluate seasonal groundwater infiltration trends.

Flow data along with groundwater and rain data for each subarea will be compared to industry standards for spring average flows and wet weather flows to determine if the flows would be considered excessive. Flows will be compared to the following industry standards:

- Guidelines from TR-16/Merrimack Curve/MOP9: Peak on maximum day ratio based on population served.
- Guidelines from 10 States Standards: Peak hour should be less the 100 gallons per capita per day times a peaking factor based on population served.
- Guidelines based on CDM Smith experience: Average daily flow greater than 120 gallons per capita per day is excessive. Wet weather flows greater than 275 gallons per capita per day is excessive. If both criteria are exceeded, a sewer system evaluative survey (SSES) study is warranted to identify and remove the excessive I/I.

5. Public Information Program

CDM Smith will work with WPCA to develop a public information and outreach program to inform the public about the overall project and intent. WPCA's current efforts relative to the news article and letter outreach regarding sump pumps serves as a spring board for the future program. Additional articles, letters, and questionnaires will be developed to once again educate the public and users regarding the program and efforts they can implement to aid and further the program.

Similar Work: CDM Smith has worked with the Town of Greenwich, CT for the over ten years on the management of the Town's long-term Private Inflow Source Removal Program, which includes the inspection of private buildings, the removal of

identified private inflow sources (e.g. sump pumps, roof leaders, drains, etc.), and the dye testing of unknown potential inflow sources. This program has turned into a multi-department coordination effort, with the Town's building inspection, plumbing inspection, and health departments working to help demonstrate the value of removing extraneous flows to residents.

Sewer Questionnaire (optional task) – Sewer questionnaires can provide valuable information in determining where there are clusters of reported problems. The results can help guide where field investigations and sewer rehabilitation may be prudent. For this task CDM Smith would develop a sewer questionnaire tailored to WPCA, distribute it, and input the results into a database linked to the GIS. The results will be mapped in GIS to show pockets of areas with clusters of relevant information such as complaints, SSOs, sump pumps, street flooding, and water in basement.

Phase I – I/I Report

This report becomes the basis for proceeding with Phase II Sewer System Evaluation Survey (SSES)

Phase II – Sewer System Evaluation Survey (SSES)

1. Flow Isolation

Flow Isolation – CDM Smith will work with the WPCA to identify the need for flow isolation and if warranted will develop a plan for implementation. It has been our experience that while flow isolation is a typical SSES field investigation, this effort is not worth the cost. Flows in pipes vary based on time of night and antecedent conditions (groundwater levels and time from last rainfall event). The results are often inconclusive as the antecedent conditions often fluctuate over the course of the field investigation program.

2. Manhole Inspection and Above Ground Survey

Manhole Inspections – The most optimum time to perform these inspections is during spring when the groundwater table is highest. This is typically performed in areas with high infiltration.

Above Ground Survey (optional task) – This task was not identified in the scope of work but is a cost-effective approach to screen areas high in inflow for direct connections (such as catch basins, sewer manhole covers with significant holes, and roof leaders piped into the ground or into building.)

3. Smoke Testing

This is typically performed in areas with high inflow. CDM Smith will work closely with WPCA to evaluate the need for smoke testing and understand the potential impact to users and potential liability to WPCA. Alternate means, such as more detailed inspections, visual inspections, and dye testing, will also be evaluated.

4. Closed Circuit Television Inspection (CCTV)

This is typically performed in areas with high infiltration and where comprehensive sewer rehabilitation is recommended to evaluate if existing pipe can be lined or if point repairs are necessary to address things such as broken pipes, sags, and severe offset joints.

Similar Work: CDM Smith assisted the MDC in Hartford with preparing bid documents to procure a closed-circuit television (CCTV) contractor. We then reviewed the bids and made a recommendation to award, provided oversight of the contractor, reviewed pay requisitions, and reviewed the condition assessment data.

5. Building Inspections

Through completion and data compilation of previous efforts determinations will be made for building inspections which may contribute to infiltration and inflow. Illicit connections, yard drains, driveway catch basins, roof leader connections, etc. will all be inspected for impacts to the system. CDM Smith will work closely with WPCA to develop a plan for identifying the number of inspections and protocols for administering the inspections.

Mystic WPCF and Pump Station Operation Evaluations (optional task)

CDM Smith is available to evaluate and review the WPCF and Pump Station operations relative to the average daily design capacity exceedances and permit limits. CDM Smith will evaluate operations for potential capacity issues and reduction and saving measures.

Phase II SSES Report with Recommendations

This report becomes the basis for proceeding with prioritized sewer rehabilitation design and construction projects.

Similar Work: A very similar flow metering approach was recently completed in Stamford. Specific details and results of the flow metering program are as follows:

- 45 flow meters were initially installed to break the sewershed in Stamford into 45 subareas with an average of 27,000 linear of sewer per subarea.
- Evaluation of the initial flow data showed that approximately 85 percent of extraneous flow in Stamford's sewershed was attributed to 14 (31 percent) of the original 45 subareas.
- Based on this initial assessment, seven flow meters were relocated coupled with the installation of 20 additional flow meters to break the 14 subareas representing 85 percent of the extraneous flow into 40 smaller subsystems with an average of 10,200 linear feet of sewer per subsystem.
- Evaluation of the flow data from the 40 smaller subsystems showed that approximately 80 percent of the extraneous flow within those 14 original subareas was attributed to 13 (33 percent) of the 40 smaller subsystems.
- As a result of this approach, the final analysis shows that 68 percent of the total extraneous flow in the Stamford sewershed came from 11 percent of the total area.
- Stamford focused RDII field investigations on these prioritized areas and is currently performing comprehensive sewer rehabilitation within those smaller subsystems.

Preliminary Project Schedule

A preliminary project schedule is provided in Figure 4-1 on the following page.

This schedule assumes that a spring 2020 flow metering program is needed to prioritize areas for future infiltration and inflow investigations. It also assumes that the WPCA submits multiple Clean Water Fund applications in a methodical approach for the project. Groundwater and rain gage installations and monitoring will be consistent with the flow metering program and continue through the end of the year. Following the completion of the flow monitoring program and the development of the Phase I SSES Report will take place. Starting in the summer flow isolation, manhole inspections, smoke testing, and building inspections will take place. The fall will result in CCTV investigations for targeted areas developed out of the previous initiatives. The final Phase II SSES Report with recommendations will be developed in the fall and completed in the 2021 with the overall program culminating in the Spring of 2021, subsequent to CT DEEP review. This schedule also assumes that the WPCA submits one Clean Water Fund application for the entire study phase, even though the location of some field investigations may not be known at the time the application is submitted. CDM Smith can proceed depending on the WPCA's objectives and timing.

Conclusion

CDM Smith has been assisting communities in Connecticut and throughout the country with assessment and rehabilitation of sewer systems for decades. We have been successful in identifying cost-effective solutions to achieving multiple goals for municipalities sewer systems, including:

- Addressing sanitary sewer backups and other SSOs
- Repairing aging infrastructure and extending its useful life
- Reducing I/I

Our prior experience has documented results of reducing I/I in sewer systems and addressing SSOs. We welcome you to reach out to our references that we have provided similar services to over the last decade. We are confident that the success we have had in many other communities can be realized by WPCA with our innovative and cost-effective approach. Additionally, we have tremendous experience in Connecticut in assessing wastewater pump stations and providing cost-effective rehabilitation recommendations. In fact, no firm has more experience with wastewater collection systems in the State nor the success we have had in securing CT DEEP approval of plans and funding through the Clean Water Fund.

Scope Items	2019			2020												2021												
	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
Initial Tasks																												
Collect/Existing Data																												
Provide Plan																												
Develop Schedule and Scope of Work																												
Prepare and Submit CT DEEP CWF application																												
CT DEEP Review/Approval of Scope, Fee and CWF application																												
Phase I																												
1. Continuous Flow Metering																												
2. Groundwater Gage Installation																												
3. Rain Gage Installation																												
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CT DEEP Review of Phase III SSES Report																												
Project Management																												
Client Meetings																												