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December 15, 2023

RFP-24-020: Professional Engineering Services to Support Preliminary and Primary Systems Upgrade Program Addendum No. 3

Respondents shall acknowledge receipt of this Addendum on the RFP-24-020 Checklist in Attachment D of the November 6, 2023 Request for Proposals (RFP) with submittal of the Proposal. Failure to do so may result in the rejection of the Proposal.

Addendum No. 3 to RFP-24-020 consists of the following:

- One (1) page of text.
- Attachment B Sample Professional Services Agreement.
- Questions from Respondents and AlexRenew responses.

Respondents shall make the following changes to all pertinent sheets, pages, and paragraphs of RFP-24-020.

- A. **Amend** the third paragraph under Section 3.5 as follows:
 - Provide information that summarizes the experience of the proposed Key Personnel, as well as Key Personnel reference projects and references described in A-F below. Information should be provided in the table format, or similar structure, shown in Table 3.1
- B. **Replace** Attachment B in its entirety with the attached Attachment B Sample Professional Services Agreement.

Response to Respondents' Questions

- Q1: In Appendix A, designated for resumes, in addition to the resumes for those filling the Key Personnel roles as defined by the RFP, can resumes for other individuals proposed to be involved in the project be included?
- A1: Resumes for other individual proposed may be included in Appendix A.
- Q2: Are licensed and qualified individuals filling the "Lead Wastewater Engineer/ Subject Matter Expert" and "Lead Structural Engineer/ Subject Matter Expert" roles required to be Virginia-licensed professional engineers??

- A2: The individuals are not required by the RFP to be Virginia-licensed professional engineers. However, individuals sealing construction documents must comply with all applicable laws and regulations of the Commonwealth of Virginia.
- Q3: Is it permissible to modify table 3.1 in the RFP as long as we include the information requested? For table 3.2, it is stated that we can include the table or a "similar structure", but for table 3.1, that same statement is not included regarding the use of a similar structure to capture the information requested.
- A3: Refer to Addendum No. 3 modifications.

Attachment B Sample Professional Services Agreement

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AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES (WHEN OWNER RETAINS A CONSTRUCTION MANAGER AT RISK)

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AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES (WHEN OWNER RETAINS A CONSTRUCTION MANAGER AT RISK)

This is an Agreement between the City of Alexandria, Virginia Sanitation Authority d/b/a AlexRenew (Owner) and [Name of Engineer] (Engineer). Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as Preliminary and Primary Systems Upgrade Program (Project). Other terms used in this Agreement are defined in Article 7. Engineer's services under this Agreement are generally identified as [Description of Engineer's services].

Owner and Engineer further agree as follows:

ARTICLE 1—SERVICES OF ENGINEER

1.1 Scope

- A. Engineer shall provide, or cause to be provided, the services set forth herein and in Exhibit A. Annual authorizations for particular scopes of services for up to a one (1) year period, will be made by an amendment to this Agreement by November 1 of each year, including associated not-to-exceed estimates for the costs of services during such period.
- B. All phases of service will include Management of Engineering Services as shown in Exhibit A.

ARTICLE 2—OWNER'S RESPONSIBILITIES

2.1 Project Information

- A. To the extent Owner has not already provided the following, or has new, additional, or revised information from that previously provided, Owner shall provide Engineer with information and data needed by Engineer in the performance of Basic and Additional Services, including Owner's:
 - 1. design objectives and constraints;
 - 2. space, capacity, and performance requirements;
 - 3. flexibility and expandability needs;
 - 4. design and construction standards;
 - 5. budgetary limitations; and
 - 6. any other available information pertinent to the Project including reports and data relative to previous designs, construction, or investigation at or adjacent to the Site.
- B. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, Owner shall obtain, furnish, or otherwise make available, if necessary through retention of specialists or consultants, such additional Project-related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services; or, with consent of Engineer, Owner may authorize the Engineer to obtain or provide all or part of such additional information as Additional Services. Such additional information or data may include the following:
 - 1. Property descriptions.

- 2. Zoning, deed, and other land use restrictions.
- 3. Surveys, topographic mapping, and utility documentation.
- 4. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
- 5. Explorations and tests of subsurface conditions at or adjacent to the Site; geotechnical reports and investigations; drawings of physical conditions relating to existing surface or subsurface structures at the Site; hydrographic surveys, laboratory tests and inspections of samples, materials, and equipment; appropriate professional interpretation of such information or data.
- 6. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental, historical, or cultural studies relevant to the Project, the Site, and adjacent areas.
- 7. Data or consultations as required for the Project but not otherwise identified in this Agreement.
- C. Owner shall examine all alternative solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer, including obtaining advice of the Construction Manager, and of an attorney, risk manager, insurance counselor, financial/municipal advisor, and other advisors or consultants, as Owner deems appropriate with respect to such examination, and render in writing timely decisions pertaining thereto.
- D. Owner shall furnish to Engineer data as to Owner's anticipated costs for services to be provided to Owner by others, including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice, so that Engineer may assist Owner in tabulating the various cost categories that comprise Total Project Costs, if Engineer is required to do so in Exhibit A.
- E. Owner shall advise Engineer if any invention, design, process, product, or device that Owner has requested, required, or recommended for inclusion in the Drawings or Specifications will be subject to payment, whether by Owner or Contractor, of any license fee or royalty to others, as required by patent rights or copyrights.
- F. Not used.
- G. Owner shall inform Engineer as to whether Engineer's assistance is requested in identifying opportunities for enhancing the sustainability of the Project.
- 2.2 Owner's Instructions Regarding Proposal Documents and Front-End CMAR Contract Documents
 - A. Owner will manage the process for selection of a CMAR. The CMAR will provide preconstruction and procurement services and construct the Work. Owner will also prepare information regarding Owner's construction management and construction contract practices and requirements, and furnish the following:
 - Owner's standard contract forms, general conditions if other than the current edition
 of EJCDC® CMAR-700, Standard General Conditions of the Construction Manager at Risk
 Contract, supplementary conditions, text, and related documents and content to be
 included in the draft Proposal Documents, and in draft Front-End CMAR Contract
 Documents;

- 2. Insurance and bonding requirements;
- 3. Protocols for electronic transmittals during bidding and construction;
- 4. Owner's safety and security programs applicable to CMAR and other Constructors;
- 5. Diversity and other social responsibility requirements;
- 6. Bidding and contract requirements of funding, financing, or regulatory entities;
- 7. Other specific conditions applicable to the procurement of construction or contract documents; and
- 8. Any other information necessary for Engineer to assist Owner in preparing the Proposal Documents and Front-End CMAR Contract Documents.
- B. Owner shall have responsibility for the final content of (1) such Proposal Documents, and (2) such Front-End CMAR Contract Documents, other than content furnished by Engineer concerning the design, as set forth in the Drawings, Specifications, or otherwise, or other engineering or technical matters. Owner shall seek the advice of Owner's legal counsel, risk managers, and insurance advisors with respect to the drafting and content of such documents.
- C. If there will be an advertisement soliciting CMAR proposals, Owner shall place and pay for such advertisement.
- D. Owner will provide copies of the items furnished under Paragraph 2.2A to Engineer, for Engineer's information and reference.

2.3 Owner-Furnished Services

- A. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, Owner shall obtain, as required for the Project:
 - Accounting, bond, and financial advisory services, including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission, independent cost estimating, and insurance counseling services.
 - 2. Legal services, including attorney review of proposed CMAR Contract Documents, legal services required by Owner, legal services needed as a result of issues raised by CMAR, and Project-related legal services reasonably requested by Engineer.
 - 3. Auditing services, including those needed by Owner to ascertain how or for what purpose CMAR has used money paid to it.
- 3. Owner shall provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of samples, materials, and equipment required by the CMAR Contract Documents (other than those required to be furnished or arranged by CMAR), or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof. Owner shall provide Engineer with the findings and reports generated by testing laboratories, including findings and reports obtained from or through CMAR.

- C. Owner shall acquire or arrange for acquisition of the Site(s) and any temporary or permanent rights of access, easements, or property rights needed for the Project.
- D. With respect to the portions or phases of the Project designed or specified by Engineer, Owner shall provide, obtain, or arrange for:
 - 1. all required reviews, approvals, consents, and permits from governmental authorities having jurisdiction, and
 - 2. such reviews, approvals, and consents from others as may be necessary for completion of each portion or phase of the Project.
- E. Owner may delegate to CMAR or others the responsibilities set forth in Paragraphs 2.3.C and D.

2.4 Owner's General Responsibilities

- A. Owner shall inform Engineer of the policies, procedures, and requirements of Owner that are applicable to Engineer's performance of services under this Agreement.
- B. Owner shall provide Engineer with Owner's budget for the Project, including type and source of funding to be used, and will promptly inform Engineer if the budget or funding sources change.
- C. Owner shall inform Engineer in writing of any safety or security programs that are applicable to the personnel of Engineer, its Subconsultants, and Engineer's Subcontractors, as they visit the Site or otherwise perform services under this Agreement.
- D. Owner shall arrange for safe 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.
- E. Owner shall provide necessary direction and make decisions, including prompt review of Engineer's submittals, and carry out its other responsibilities in a timely manner so as not to delay Engineer's performance of its services.
- F. Owner shall be responsible for all requirements and instructions that it furnishes to Engineer pursuant to this Agreement, and for the accuracy and completeness of all programs, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use and rely upon such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement, subject to any express limitations or reservations applicable to the furnished items.
- G. Owner shall give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of:
 - 1. Any development that affects the scope or time of performance of Engineer's services;
 - 2. The presence at the Site of any Constituent of Concern; or
 - 3. Any relevant, material defect or nonconformance in: (a) Engineer's services, (b) the Work, (c) the performance of any Constructor, or (d) Owner's performance of its responsibilities under this Agreement.
- H. Not used.

I. Owner shall advise Engineer of the identity and scope of services of any other independent consultants retained by Owner to perform or furnish services in regard to the Project.

J. Owner shall:

- 1. Attend and participate in the pre-proposal conference, pre-construction conferences, construction progress and other job-related meetings, and Site visits to determine Substantial Completion and readiness of the completed Work for final payment.
- 2. Primarily communicate with Engineer's Subcontractors and Subconsultants through the Engineer.
 - a. Promptly inform Engineer of the substance of any communications between Owner and Engineer's Subcontractors or Subconsultants.
 - b. Refrain from directing the services of Engineer's Subcontractors or Subconsultants.
- 3. Authorize Engineer to provide Additional Services as set forth in Article 2 of Exhibit A of the Agreement, as required.
- 4. Perform or provide the following:

a. Reserved

2.5 Payment

- A. Owner shall pay Engineer as set forth in Article 4 and Exhibit J.
- B. Engineer's compensation is based on the development of scope and not-to-exceed budget for each fiscal year for the duration of the Project using the template provided in Exhibit J.3.
 - 1. Compensation items and totals based in whole or in part on Hourly Rates, or Direct Labor are estimates only.
 - 2. Lump sum amounts incorporate Engineer's labor, overhead, profit, and Engineer's Subcontractor and Subconsultants' charges.
 - 3. Engineer shall prepare a draft scope and budget for each Fiscal Year that shall be submitted to Owner no later than November 1, with a final scope and budget that shall be submitted to Owner no later than December 1.
 - 4. The updated Scope and Budget for each Fiscal Year shall be incorporated into this Agreement by mandatory Amendments to Exhibits A and J respectively.
- C. Owner and Engineer acknowledge that CMAR is expected to establish a non-linear, non-sequential plan for design and construction using fast-tracking, Early Work Packages, and Early Work Package Amendments. The Engineer's schedule and compensation established in this Agreement are based on preliminary, limited assumptions regarding the design and construction process. As additional information becomes available, Owner may agree to, to the extent the Engineer is impacted by such, to make an equitable adjustment of schedule and compensation with the Engineer:

ARTICLE 3—SCHEDULE FOR RENDERING SERVICES

3.1 Commencement

A. Engineer is authorized to begin rendering services as of the Effective Date.

3.2 Time for Completion

- A. Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services, or specific dates by which services are to be completed, are provided in Exhibit B, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, will be adjusted equitably.
- C. 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, will be adjusted equitably.
- D. If Engineer fails, for reasons within control of Engineer, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled, as its sole remedy, to the recovery of direct damages to the extent, if any, resulting from such failure by Engineer.

ARTICLE 4—INVOICES AND PAYMENTS

4.1 Invoices

A. Preparation and Submittal of Invoices—Engineer shall prepare invoices in accordance with its standard invoicing practices, the progress reporting and special invoicing requirements, if any, in Exhibit A Paragraph 1.1.A, and the terms of Exhibit J. Engineer shall submit its invoices to Owner on a monthly basis by the 15th day of each month. Invoices are due and payable within 30 days of receipt of a correct and complete invoice, which includes at a minimum all applicable information described in this Agreement, Exhibit A and Exhibit J. Owner shall not be required to make any payment to Engineer until Engineer has provided Owner with its federal employer identification number.

4.2 Payments

- A. Application to Interest and Principal—Payment will be credited first to any interest owed to Engineer and then to principal.
- B. Disputed Invoices—If Owner disputes an invoice, either as to amount or entitlement, then Owner shall advise Engineer in writing of the specific basis for doing so within 15 days after receipt of such invoice; may withhold only that portion so disputed; and must pay the undisputed portion, subject to the terms of Paragraph 4.1. After a disputed item has been resolved, Engineer shall include the agreed-upon amount on a new invoice.
- C. Failure to Pay—If Owner fails to make any undisputed payment due Engineer within 30 days after receipt of Engineer's invoice, then:

- 1. amounts due Engineer will be increased at the rate 1.0% per month on the amount past due by 30 days, or the maximum rate of interest permitted by law, if less, from said thirtieth day, and
- 2. Engineer may, after giving 15 days' written notice to Owner, suspend services under this Agreement until Owner has paid in full amounts due. Owner waives any and all claims against Engineer for any such suspension.
- D. Sales or Use Taxes—If after the Effective Date any governmental entity takes an action that imposes additional sales or use taxes on Engineer's services or compensation under this Agreement, then Engineer may invoice such additional sales or use taxes for reimbursement by Owner. Owner shall reimburse Engineer for the cost of such invoiced additional sales or use taxes; such reimbursement will be in addition to the compensation to which Engineer is entitled under the terms of Exhibit J.
- E. Engineer shall take one of the two following actions within 7 days after receipt of amounts paid to Engineer by Owner for services performed by Subconsultants or Engineer's Subcontractors:
 - 1. Pay the Subconsultant or Engineer's Subcontractor for the proportionate share of the total payment received from Owner attributable to the services performed by the Subconsultant or Engineer's Subcontractor; or
 - 2. Notify Owner and the Subconsultant or Engineer's Subcontractor, in writing, of Engineer's intention to withhold all or a part of the Subconsultant's or Engineer's Subcontractor's payment with the reason for nonpayment.
- F. Engineer shall pay interest to the Subconsultant or Engineer's Subcontractor on all amounts owed by Engineer that remain unpaid after 7 days following receipt by Engineer of payment from Owner for services performed by the Subconsultant or Engineer's Subcontractor, except for amounts withheld as allowed herein.
- G. Engineer shall include in each of its subcontracts a provision requiring each Subconsultant and Engineer's Subcontractor to include or otherwise be subject to the same invoicing, payment and interest requirements with respect to each lower-tier subconsultant or subcontractor.
- H. Engineer's obligation to pay an interest charge to a Subconsultant or Engineer's Subcontractor pursuant to this Agreement shall not be construed to be an obligation of Owner. A contract modification shall not be made for providing reimbursement for the interest charge. A cost reimbursement claim shall not include any amount for reimbursement for the interest charge.
- I. Nothing contained in this Agreement shall create any contractual relationship between any Subconsultants or Engineer's Subcontractors and Owner.

ARTICLE 5—OPINIONS OF COST OF THE WORK

- 5.1 Opinions of Probable Cost of the Work
 - A. To the extent that CMAR renders opinions regarding probable Cost of the Work, Engineer assumes no responsibility for the accuracy of such opinions.

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- B. Engineer's opinions of probable Cost of the Work 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 Cost of the Work will not vary from opinions of probable Cost of the Work prepared by Engineer, if any.
- C. If Owner requires greater assurance as to probable Cost of the Work than the opinions, if any, provided by CMAR or Engineer, then Owner agrees to obtain an independent cost estimate.

5.2 Opinions of Total Project Costs

A. The services, if any, of Engineer with respect to Total Project Costs will be limited to assisting the Owner in tabulating the various categories that comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

ARTICLE 6—GENERAL CONSIDERATIONS

6.1 Standards of Performance

- A. 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 the subject profession practicing under similar circumstances 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.
- B. 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.
- C. Engineer's Subcontractors and Subconsultants—Engineer may retain such Engineer's Subcontractors and Subconsultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.
- D. Reliance on Others—Subject to the standard of care set forth in Paragraph 6.1.A, Engineer may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- E. Compliance with Laws and Regulations, and Policies and Procedures
 - 1. Engineer and Owner shall comply with applicable Laws and Regulations.
 - 2. Engineer shall comply with the policies, procedures, and instructions of Owner that are applicable to Engineer's performance of services under this Agreement and that Owner provides to Engineer in writing, subject to the standard of care set forth in

- Paragraph 6.1.A, and to the extent compliance is not inconsistent with professional practice requirements.
- 3. This Agreement is based on Laws and Regulations and Owner-provided written policies and procedures as of the Effective Date. The following may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation:
 - a. changes after the Effective Date to Laws and Regulations,
 - b. the receipt by Engineer after the Effective Date of Owner-provided written policies and procedures, and
 - c. changes after the Effective Date to Owner-provided written policies or procedures.
- F. General Conditions of the CMAR Contract—The general conditions of the Owner-CMAR contract will be based on, but different from, the current edition of EJCDC® C-700, Standard General Conditions of the Construction Contract, prepared by the Engineers Joint Contract Documents Committee, unless expressly indicated otherwise.
- G. Copies of Drawings and Specifications—Engineer shall deliver to Owner at least one complete electronic copy of such Drawings and Specifications, and of each such Work Package, signed and sealed according to applicable Laws and Regulations, and one complete printed copy, duly signed and sealed.
- H. Engineer shall not be required to sign any document, no matter by whom requested, that would result in Engineer having to certify, guarantee, or warrant conditions whose existence Engineer cannot ascertain within the authorized scope of Engineer's services. Owner agrees not to make resolution of any dispute with Engineer or payment of any amount due to Engineer in any way contingent upon Engineer signing any such document.
- I. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor will 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.
- J. 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 CMAR Contract Documents.
- K. Engineer shall not be responsible for any decision made regarding the CMAR Contract Documents, or any application, interpretation, clarification, or modification of the CMAR Contract Documents, other than those made by Engineer.
- L. 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.
- M. Engineer's services do not include providing legal advice or representation.

- N. 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.
- O. While at the Site, Engineer, its Subconsultants, and Engineer's Subcontractors, and their employees and representatives will comply with the applicable requirements of CMAR's and Owner's safety programs of which Engineer has been informed in writing.
- P. Engineer shall not be responsible for the acts or omissions of CMAR, or for CMAR's performance of services for Owner.
- Q. In the performance of its services for Owner, Engineer shall to the extent practical: (1) accommodate recommendations and advice from CMAR regarding Engineer's services, including engineering, construction, cost, and technical matters, and (2) take into account differences of opinion that have arisen between Engineer and CMAR, or both, regarding all such matters; provided, however, that in performing its services Engineer will proceed in a manner that preserves and protects the integrity of the design, adheres to sound engineering practices, and meets Engineer's professional obligations. Engineer shall report any such differences of opinion to Owner, together with a brief explanation of the basis for Engineer's proposed resolution of the issue.

6.2 Ownership and Use of Documents

- A. All Documents are instruments of service, and Engineer owns the Documents, including all associated copyrights and the right of reuse at the discretion of the Engineer, subject to the following provisions:
 - Upon receipt by Engineer of payment due and owing for services relating to preparation
 of the Documents through the time such payment is due and subject to the express
 exclusions that follow, Engineer and any Subconsultants will grant to Owner the
 ownership of the Documents, including all associated copyrights and the right of reuse.
 - 2. When requested by Owner, Engineer will perform any clerical or administrative acts reasonably necessary to confirm or record the transfer of Engineer's interests in the Documents to the Owner, and Owner will reimburse the Engineer for its reasonable, verifiable costs to comply with the transfer request.
 - 3. Engineer shall have and retain the ownership, title, and property rights, including copyright, patent, intellectual property, and common law rights, in any design elements, including but not limited to standard details, drawings, plans, specifications, methodologies, and engineering computations, used in the Documents, but developed by Engineer or its Subconsultants previous to or independent of this Agreement ("Previously/Independently Created Works"). Engineer shall provide appropriate verification of such previous or independent development upon Owner's request.
 - 4. Upon receipt by Engineer of payment due and owing for services relating to preparation of the Documents through the time such payment is due, Engineer will issue to Owner a royalty-free, nonexclusive, and irrevocable license to use such

- Previously/Independently Created Works on the Project or on any extension of the Project.
- 5. Owner acknowledges that the 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, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer.
- 6. 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 its officers, directors, members, partners, agents, employees, and Subconsultants.
- 7. Intentionally deleted.
- 8. Such limited license to Owner shall not create any rights in third parties.
- 9. Nothing herein limits the Engineer's right of use or reuse of Previously/Independently Created Works or any of Engineer's non-Document work product.
- B. If Engineer at Owner's request verifies the suitability of the Documents, completes them, or adapts them for extensions of the Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.
- C. Engineer shall inform Owner if Engineer is aware of any invention, design, process, product, or device specified in the Drawings, Specifications, or other Documents that is subject to payment, whether by Owner or Contractor, of any license fee or royalty to others, as required by patent rights or copyrights. If Engineer's good-faith inclusion in the Drawings, Specifications, or other Documents of new, innovative, or non-standard technologies, for the benefit of Owner and the Project, results in third-party claims of infringement or violation of intellectual property rights, then Owner and Engineer shall share equally the costs of defending against, settling, or paying such claims.
- D. Engineer will obtain Owner's consent, which will not be unreasonably withheld, prior to releasing any publicity, including news and press releases, promotional publications, award and prize competition submittals, and other advertising regarding the subject matter of this Agreement. Nothing herein will limit the Engineer's right to include information in statements of qualifications and proposals to others accurately describing its participation and participation of employees in the Project.

6.3 Electronic Transmittals

- A. To the fullest extent practical, Owner and Engineer agree to transmit, and 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.
 - 1. Compliance with the EDP by Engineer shall be considered a Basic Service and no direct or separate compensation will be paid to Engineer for such compliance unless provisions for separate compensation are expressly set forth in the EDP.

- 2. Engineer's costs directly attributable to changes in Engineer's Electronic Documents obligations, after the effective date of this Agreement, necessitated by revisions to Exhibit F, delayed adoption of Exhibit F, or implementation of other Electronic Documents protocols, will be compensated as Additional Services.
- B. If this Agreement does not include Exhibit F or otherwise does not establish or include protocols for transmittal of Electronic Documents by Electronic Means, then Owner and Engineer may operate without specific protocols or may jointly develop such protocols at a later date.
- C. Except as stated otherwise in Exhibit F, if included in this Agreement, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long term compatibility, usability, or readability of the Electronic Documents 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 Electronic Documents, or from those established in applicable protocols.
- D. This Agreement, including the EDP, is not intended to create obligations for Owner or Engineer with respect to transmittals to or from third parties, except as expressly stated in the EDP.

6.4 Insurance

- A. Engineer shall procure and maintain insurance as set forth in Exhibit G.
- B. Additional Insureds—The Engineer's commercial general liability, automobile liability, and umbrella or excess liability policies, must:
 - 1. include and list as additional insureds Owner and any individuals or entities identified as additional insureds in Exhibit G;
 - 2. include coverage for the respective officers, directors, members, partners, and employees of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby, including as applicable those arising from both ongoing and completed operations; and
 - 4. not seek contribution from insurance maintained by the additional insured.
- C. Owner shall require Owner's Advisor and CMAR to purchase and maintain policies of insurance covering workers' compensation, general liability, and motor vehicle damage and injuries.
- D. Engineer shall deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates must be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement. Upon request by Owner or any other insured, Engineer shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, documentation of applicable self-insured retentions, if allowed, and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subconsultants and Engineer's Subcontractors. In any documentation furnished under this provision, Engineer may redact (a) any confidential premium or pricing

- information and (b) any wording specific to projects or jurisdictions other than those applicable to this Agreement.
- E. Engineer waives all rights against Owner and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss arising from the Engineer's work or that of their subcontractors regardless of whether or not insured. Engineer shall require all insurers to waive subrogation against the Owner for all claims covered by insurance.
- F. All policies of insurance to be carried by the Engineer must contain a provision or endorsement that the coverage afforded will not be canceled, and that renewal will not be refused, until at least 10 days' prior written notice has been given to the Owner.
- G. At any time, Owner may request that Engineer, or Engineer's Subcontractors or Subconsultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require Engineer's Subcontractors or Subconsultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

6.5 Suspension and Termination

A. Suspension

- 1. By Owner—Owner may suspend Engineer's services for up to 90 days upon 7 days' written notice to Engineer.
- 2. By Engineer—Engineer may, after giving 15 days' written notice to Owner, suspend services under this Agreement:
 - a. if Owner has failed to pay Engineer for invoiced services and expenses, as set forth in Paragraphs 4.2.B and 4.2.C;
 - b. in response to the presence of Constituents of Concern at the Site, as set forth in Paragraph 6.9.D.
 - c. Reserved.

B. Termination for Cause

- 1. Either party may terminate the Agreement for cause upon 30 days' written notice in the event of substantial failure by the other party to perform in accordance with the terms of the Agreement, through no fault of the terminating party.
 - Paragraph 6.5.B.1 if the party receiving such notice begins, within 7 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 will extend up to, but in no case more than, 60 days after the date of receipt of the notice.
- 2. In addition to its termination rights in Paragraph 6.5.B.1, Engineer may terminate this Agreement for cause upon 15 days' written notice:
 - a. if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional;
 - if Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control and for which the Owner is responsible; or
 - c. as the result of the presence at or adjacent to the Site of undisclosed Constituents of Concern, as set forth in Paragraph 6.9.E.
- 3. Engineer will have no liability to Owner on account of any termination by Engineer for cause.
- C. Termination for Convenience—Owner may terminate this Agreement for convenience, effective upon Engineer's receipt of notice from Owner. Additionally, because all payment obligations from Owner under this Agreement are subject to the availability of appropriations from Owner's Board of Directors, in the event of non-appropriation of funds, irrespective of the source of funds, for the services under this Agreement, Owner may terminate this Agreement, in whole or in part, for those goods or services for which funds have not been appropriated. Written notice will be provided to Engineer as soon as possible after such action is completed.
- D. Extension of Effective Date of Termination—If Owner terminates the Agreement for cause or convenience, Owner 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. Engineer shall be entitled to compensation for such tasks.
- E. Payments Upon Termination—In the event of any termination under Paragraph 6.5, 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 will have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.2.A.
 - If Owner has terminated the Agreement for cause and disputes Engineer's entitlement
 to compensation for services and reimbursement of expenses, then Engineer's
 entitlement to payment and Owner's rights to the use of the Documents will be
 resolved in accordance with the dispute resolution provisions of this Agreement or as
 otherwise agreed in writing.
 - If Owner has terminated the Agreement for convenience, or if Engineer has terminated the Agreement for cause, then Engineer will be entitled, in addition to the payments identified above, 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 Subcontractors or Subconsultants, and other related closeout costs, using methods and rates for Additional Services as set forth in Exhibit J.

6.6 Successors, Assigns, and Beneficiaries

- A. Owner and Engineer are hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer, and to the extent permitted by Paragraph 6.6.B the assigns of Owner and Engineer, are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives, and said assigns, of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest, including, but without limitation, claims arising out of this Agreement or money that is due or may become due, in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated 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.
- C. Unless expressly provided otherwise in this Agreement:
 - 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.
 - 2. Nothing in this Agreement will be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them.
 - 3. Owner agrees that the substance of the provisions of this Paragraph 6.6.C will appear in the CMAR Contract Documents.

6.7 Dispute Resolution

- A. Owner and Engineer shall resolve all disputes in the following manner:
 - Engineer shall give notice to Owner, with a copy to Owner's designated representative,
 of any dispute arising out of or relating to this Agreement, in writing and within 10 days
 for the occurrence or beginning of the dispute. Owner and Engineer agree to negotiate
 all disputes between them in good faith for a period of 30 days from the date of notice,
 prior to invoking any other form of dispute resolution.
 - 2. If the Owner and Engineer are unable to resolve the dispute through good faith negotiation, then the Engineer shall submit a claim to Owner, with a copy to Owner's designated representative, detailing in writing the dispute and requested resolution, in writing and within 10 days after the conclusion of the negotiation period set forth in Paragraph 6.7.A.1. Engineer's failure to timely submit such claim shall mean that Engineer has waived the claim and has no further right to pursue a remedy for such dispute. Owner's Chief Executive Officer shall consider Engineer's claim and shall render a final decision in writing on such claim within 60 days of Owner's receipt of the claim.

- 3. If the Engineer disagrees with the Chief Executive Officer's final decision, or if the Chief Executive Officer fails to render a written final decision in within the time set forth in Paragraph 6.7.A.3, then the Engineer may pursue further action as follows. First, the Engineer shall request, in writing and within 10 days after the Chief Executive Officer's final decision (or time when the final decision should have been issued, as applicable), that the Owner agree to participate in voluntary, non-binding mediation of the dispute. If so agreed, Owner and Engineer agree to participate in the mediation process in good faith. The process will be conducted on a confidential basis and must be completed within 120 days. Each party shall bear its own costs of mediation and the parties shall split equally the costs and fees charged by the mutually agreeable mediator selected by the parties to conduct the mediation.
- 4. If the parties fail to resolve a dispute through negotiations under Paragraph 6.7.A.1, Owner's Chief Executive Officer's review of the claim under Paragraph 6.7.A.2 or mediation under Paragraph 6.7.A.3 (if conducted), then:
 - a. Engineer may institute legal action as provided under Section 2.2-4364 of the Code of Virginia, in the circuit courts of the City of Alexandria, Virginia, which the parties agree shall have exclusive jurisdiction over any disputes arising out of or relating to this Agreement. THE PARTIES AGREE TO WAIVE THEIR RIGHT TO TRIAL BY JURY AND AGREE TO HAVE ANY LITIGATION HEARD AND DECIDED BY A JUDGE SITTING WITHOUT A JURY.

6.8 Controlling Law; Venue

- A. This Agreement is to be governed by the Laws and Regulations of the state in which the Project is located.
- B. Venue for any exercise of rights at law will be the circuit courts of the City of Alexandria, Virginia.

6.9 Environmental Condition of Site

- A. Owner represents to Engineer that, as of the Effective Date, to the best of Owner's knowledge, no Constituents of Concern, other than those disclosed in writing to Engineer, exist at or adjacent to the Site.
- B. Undisclosed Constituents of Concern—For purposes of this Paragraph 6.9, the presence at or adjacent to the Site of Constituents of Concern that were not disclosed to Engineer pursuant to Paragraph 6.9.A, in such quantities or circumstances that such Constituents of Concern may present a danger to persons or property exposed to them, will be referred to as "undisclosed" Constituents of Concern.
 - The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of this Agreement or the CMAR Contract, are not undisclosed Constituents of Concern.
 - Constituents of Concern that are to be located, identified, studied, removed, or remediated as part of the services under this Agreement are not undisclosed Constituents of Concern.

- Constituents of Concern that are to be located, identified, studied, removed, or remediated as part of the services under another professional services contract for Owner, or as part of the work under a construction or remediation contract, are not undisclosed Constituents of Concern if Engineer has been informed of the general scope of such contract.
- C. If Engineer encounters or learns of an undisclosed Constituent of Concern at the Site, then Engineer shall notify (1) Owner and (2) appropriate authorities having jurisdiction if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.
- D. It is acknowledged by both parties that Engineer's scope of services does not include any services related to undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an undisclosed Constituent of Concern, or if encountered, uncovered, or revealed Constituents of Concern are present in substantially greater quantities or substantially different locations than disclosed or anticipated, or if investigative or remedial action, or other professional services, are necessary or required by applicable Laws and Regulations with respect to such Constituents of Concern, then Engineer may, at its option and without liability for direct, consequential, or any other damages, suspend performance of services on the portion of the Project adversely affected thereby until such portion of the Project is no longer so affected; and Owner shall promptly determine whether to retain a qualified expert to evaluate such condition or take any necessary corrective action.
- E. If the presence at the Site of undisclosed Constituents of Concern, or of Constituents of Concern in substantially greater quantities or in substantially different locations than disclosed or anticipated, adversely affects the performance of Engineer's services under this Agreement, then:
 - if the adverse effects do not preclude Engineer from completing its Project services in general accordance with this Agreement on unaffected or marginally affected portions of the Project, Engineer may accept an equitable adjustment in its compensation or in the time of completion, or both; and the Agreement will be amended to reflect changes necessitated by the presence of such Constituents of Concern; or
 - if the adverse effects are of such materiality to the overall performance of Engineer that
 it cannot complete its services without significant changes to the scope of services, time
 of completion, and compensation, then Engineer may terminate this Agreement for
 cause on 15 days' written notice.
- F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and will not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as 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.

6.10 Indemnification and Waiver

A. Indemnification by Engineer—To the fullest extent permitted by Laws and Regulations, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, partners, agents, and employees, from losses, damages, and judgments, including

reasonable consultants' and attorneys' fees and expenses, arising from third-party claims or actions relating to the Project, provided that any such claim, action, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, other than the Work itself, including the loss of use resulting therefrom, but only to the extent caused by any intentional misconduct, negligent act or omission of Engineer or Engineer's officers, directors, members, partners, agents, employees, Subconsultants, or Engineer's Subcontractors.

- B. Intentionally deleted.
- C. No Defense Obligation—The indemnification commitments in this Agreement do not include a defense obligation by the indemnitor unless such obligation is expressly stated.
- D. Percentage Share of Negligence—To the fullest extent permitted by Laws and Regulations, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, will not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.
- E. Waiver—To the fullest extent permitted by Laws and Regulations, Engineer waives against Owner, and Owner's officers, directors, members, partners, agents, employees, subconsultants, and insurers, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, from any cause or causes. Such excluded damages include but are not limited to loss of profits or revenue; loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; and cost of capital.

6.11 Records Retention

A. Engineer shall maintain on file in legible form, for a period of five years following completion or termination of its services, or such other period as required by Laws and Regulations, all Documents, records (including cost records), and design calculations related to Engineer's services or pertinent to Engineer's performance under this Agreement. Upon Owner's request, Engineer shall provide a copy of any such item to Owner at cost.

6.12 Miscellaneous Provisions

- A. Notices—Any notice required under this Agreement will be in writing and delivered: in person (by commercial courier or otherwise); by registered or certified mail; or by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line. All such notices are effective upon the date of receipt.
- B. Survival—Subject to applicable Laws and Regulations, all express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.
- C. Severability—Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Engineer.

- D. No Waiver—A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Agreement.
- E. Accrual of Claims—To the fullest extent permitted by Laws and Regulations, all causes of action arising under this Agreement will be deemed to have accrued, and all statutory periods of limitation will commence, no later than the date of Substantial Completion; or, if Engineer's services do not include Construction Phase services, or the Project is not completed, then no later than the date of Owner's last payment to Engineer.
- Key Personnel All Key Personnel identified in Exhibit J are committed to this Agreement for the duration of the Agreement, for so long as they remain employed by Engineer. Likewise, if a Key Personnel is identified in an amendment, such individual shall be committed for the remainder of the duration of the Agreement, for so long as they remain employed by Engineer. If extraordinary circumstances require a proposed change in Key Personnel under this Agreement, it must be submitted in writing to Owner's designated representative. In circumstances where the change is based on a Key Personnel leaving the employ of Engineer, qualifications information shall be provided on one or more proposed substitutes, and Owner's designated representative, at his/her reasonable discretion, will determine who will become the substitute and remain a Key Personnel going forward, and an amendment shall be executed to reflect the approved change. In circumstances where the change concerns a Key Personnel who will remain in the employ of Engineer, information about the basis for the change request and qualifications information for one or more proposed substitutes will be provided and Owner's designated representative, at his/her reasonable discretion, will determine whether to authorize the proposed removal and, if approved, who shall become the substitute and remain a Key Personnel going forward and an amendment shall be executed to reflect the approved change.
- G. Non-Discrimination Engineer will not discriminate against any employee or applicant for employment because of age, race, color, disability, religion, sex, national origin or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of Engineer.
 - 1. Engineer agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - Engineer, in all solicitations or advertisements for employees placed by or on behalf of Engineer, will state that it is an equal opportunity employer. Notices, advertisements, and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for meeting this requirement.
 - 3. Engineer will include the substance of this Paragraph 6.12.G in every subcontract or purchase order equal to or greater than \$10,000 in value unless exempted by rules, regulations, or orders of the U.S. Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, so that such provisions will be binding upon each Subconsultant or Engineer's Subcontractor.

- H. Non-Discrimination against Faith-Based Organizations Owner does not discriminate against faith-based organizations and Engineer agrees not to discriminate against faith-based organizations.
- Federal Immigration Law Engineer, its Subconsultants and Engineer's Subcontractors, and any others it may employ do not, and will not during the term of this Agreement, knowingly employ an unauthorized alien as defined in the Federal Immigration and Reform and Control Act of 1986.
- J. Drug-Free Workplace Throughout the term of this Agreement, Engineer agrees to:
 - 1. provide a drug-free workplace for Engineer's employees;
 - post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in Engineer's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
 - 3. state in all solicitations or advertisements for employees placed by or on behalf of Engineer that Engineer maintains a drug-free workplace; and
 - 4. include the provisions of the foregoing clauses in every subcontract or purchase order equal to or greater than \$10,000 in value, so that the provisions will be binding upon each Subconsultant or Engineer's Subcontractor.

For the purposes of this provision, "drug-free workplace" means any site for the performance of services in connection with this Agreement, where the employees of Engineer are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana.

- K. Authorization to Conduct Business in the Commonwealth of Virginia Engineer must, pursuant to Code of Virginia §2.2-4311.2, be and remain authorized to transact business in the Commonwealth of Virginia during the entire term of the Agreement, otherwise, the Agreement is voidable at the sole option of and no expense to Owner.
- Cyber Security Compliance Engineer shall comply with all applicable federal, state and local Laws and Regulations related to cybersecurity. Engineer also agrees to comply with all provisions of the Owner's then-current cybersecurity and information technology policies and procedures, as are pertinent to Engineer's operation. Engineer may, at any time, be required to execute and complete, for each individual Engineer's employees or agents, additional forms which may include non-disclosure agreements to be signed by Engineer's employees or agents acknowledging the confidentiality of Owner's information entrusted with which such employees and agents while working on the Project. Any unauthorized release of proprietary or personal information by Engineer or an employee or agent of Engineer, including but not limited to Subconsultants or Engineer's Subcontractors, shall constitute a breach of its obligations under this Paragraph and the Agreement. Engineer shall immediately notify Owner, if applicable, of any "breach of security of the system" as that term is defined in Virginia Code 18.2-186.6, and other personal identifying information, such as personnel data or date of birth, provided by Owner to Engineer. Engineer shall provide Owner the opportunity to participate in the investigation of the breach and to exercise control over reporting the unauthorized disclosure, to the extent permitted by Laws and

Regulations. Engineer shall indemnify and hold Owner harmless from and against any and all fines, penalties (whether criminal or civil), judgments, damages and assessments, including reasonable expenses suffered by, accrued against, or charged to or recoverable from Owner, on account of the failure of Engineer to perform its obligations pursuant to this Paragraph.

- M. Liens Owner's interest, whether in fee simple or easement, in any site at which the work or services under this Agreement is to be provided, cannot be subjected to a mechanic's lien because mechanics liens cannot be placed on publicly-owned property rights in the Commonwealth of Virginia.
- N. Confidentiality Each party shall (i) hold in strict confidence all confidential information of the other party, (ii) use the confidential information solely to perform or to exercise its rights under this Agreement, and (iii) not transfer, display, convey or otherwise disclose or make available all or any part of such confidential information to any third-party. However, parties may disclose the confidential information to such individuals that are bound by non-disclosure contracts. Each party shall take the same measures to protect against the disclosure or use of the confidential information as it takes to protect its own proprietary or confidential information (but in no event shall such measures be less than reasonable care).
 - 1. The term "confidential information" shall not include information that is:
 - a. in the public domain through no fault of the receiving party or of any other person or entity that is similarly contractually or otherwise obligated;
 - b. obtained independently from a third-party without an obligation of confidentiality to the disclosing party and without breach of this Agreement;
 - c. developed independently by the receiving party without reference to the Confidential Information of the other party; or
 - d. required to be disclosed under the Virginia Freedom of Information Act (§§2.2-3700 et seq. of the Code of Virginia) or similar Laws or Regulations or pursuant to a court order.
 - 2. Upon the termination or expiration of this Agreement or upon the earlier request of Owner, Engineer shall:
 - a. at its own expense, (1) promptly return to Owner all tangible confidential information (and all copies thereof except the record required by Laws or Regulations), or (2) upon written request from Owner, destroy such confidential information and provide Owner with written certification of such destruction, and
 - b. cease all further use of Owner's confidential information, whether in tangible or intangible form.

Notwithstanding the requirements herein, Engineer may retain one (1) archival copy of the confidential information for its use in the performance of services hereunder, provided that such information is kept in strict confidence and Engineer employs prudent measures to maintain its integrity and nondisclosure.

Owner shall retain and dispose of Engineer's confidential information in accordance with the Commonwealth of Virginia's records retention policies.

3. Engineer shall not use the name of Owner or refer to Owner, directly or indirectly, in any press release or formal advertisement without receiving prior written consent of Owner. In no event may Engineer use a proprietary mark of Owner without receiving a prior written consent of Owner. Engineer shall not make any communications on behalf of Owner with any federal, state or local government officials or news media without a prior written approval of Owner.

ARTICLE 7—DEFINITIONS

7.1 Defined Terms

- A. Wherever used in this Agreement, including the exhibits hereto, terms, including the singular and plural forms, printed with initial capital letters have the meanings indicated in the text above, in the exhibits, or in the following definitions:
 - Addenda—Written or graphic instruments issued prior to the opening of Proposals which clarify, correct, or change the Proposal Documents or the proposed CMAR Contract Documents.
 - 2. Additional Services—Services which are not included in Basic Services, but which are identified in Article 2 of Exhibit A of this Agreement and may be authorized by Owner.
 - 3. Agreement—This written contract for professional services between Owner and Engineer, including all exhibits identified in Paragraph 8.1 and all duly executed amendments.
 - 4. Basic Services—The services to be performed for or furnished to Owner by Engineer in accordance with Article 1 of Exhibit A of this Agreement.
 - 5. Change Order—A document which is signed by CMAR and Owner after the Effective Date of the CMAR Contract and authorizes an addition, deletion, or revision in the authorized Work, an adjustment in the applicable incremental Guaranteed Maximum Price or Contract Times, or other revision to such Early Work Package Amendment or GMP Amendment.
 - 6. Change Proposal—A written request by CMAR, duly submitted in compliance with the procedural requirements set forth in the CMAR Contract, seeking an adjustment in the CMAR Contract's Guaranteed Maximum Price or CMAR Contract Times, or both; or seeking other relief with respect to the terms of the CMAR Contract.
 - 7. CMAR Contract—The entire and integrated written contract between Owner and CMAR concerning the Work, inclusive of Preconstruction Services and Construction Services.
 - 8. CMAR Contract Price—The money that Owner has agreed to pay CMAR for performance and completion of the Work in accordance with the Contract Documents.
 - 9. CMAR Contract Times—The number of days or the dates by which CMAR must: (a) achieve milestones, if any, in the CMAR Contract; (b) achieve Substantial Completion; and (c) complete the Work and all required services.
 - 10. Reserved.
 - 11. Constituents of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous

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- waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. Construction Manager at Risk (CMAR)—The entity with which Owner enters into a Contract to provide services and construction.
- 13. Constructor—Any person or entity, not including the Engineer, or its employees, agents, representatives, or Subconsultants, or Engineer's Subcontractors, performing or supporting construction activities relating to the Project, including but not limited to the CMAR and its Subcontractors and Suppliers, Owner's work forces, utility companies, other contractors, design-builders, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.
- 14. Contract Documents—Those items designated as "Contract Documents" in the CMAR Contract, and which together comprise the CMAR Contract. See also definition of "Front-End Contract Documents" below.
- 15. Cost of the Work—The sum of eligible costs incurred by CMAR for the performance of the Work, as allowed by the Cost of the Work provisions set forth in the CMAR Contract, including construction labor, services, materials, and equipment. Without limitation, the Cost of the Work does not include the cost of performing Preconstruction Services; the CMAR Fee; the CMAR Contingency; costs of the services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to property; Owner's costs for legal, accounting, insurance counseling, or auditing services; interest or financing charges incurred in connection with the Project; or the cost of other services to be provided by others to Owner. Cost of the Work is one of the items comprising Total Project Costs.
- 16. Documents—All documents expressly identified as deliverables in this Agreement, whether in printed or Electronic Document form, required by this Agreement to be provided or furnished by Engineer to Owner. Such specifically required deliverables may include, by way of example, Drawings, Specifications, data, reports, building information models, and civil integrated management models.
- 17. Drawings—That part of the Contract Documents that graphically shows the scope, extent, and character of the Work to be performed by CMAR.
- 18. Effective Date—The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, the date on which this Agreement is signed and delivered by the last of the parties to sign and deliver.
- 19. Electronic Document—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
- 20. Electronic Means—Electronic mail (e-mail), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by

the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Agreement. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

- 21. Engineer—The individual or entity named as such in this Agreement.
- 22. Engineer's Subcontractor—An individual, firm, vendor, or other entity having a contract with Engineer to furnish general services, equipment, or materials with respect to the Project as an independent contractor.
- 23. Field Order—A written order issued by Owner which requires minor changes in the Work but does not change the CMAR Contract's Guaranteed Maximum Price or the CMAR Contract Times.
- 24. Fiscal Year-The twelve (12) month period over which Owner does its accounting, starting July 1 and ending June 30 of each year.
- 25. Front-End Contract Documents—Those Contract Documents whose primary purpose is to establish legal and contractual terms and conditions, typically including the Owner-CMAR agreement, bonds, general conditions, and supplementary conditions. The term excludes the Drawings and Specifications, and any Contract Documents delivered or issued after the effective date of the CMAR Contract.
- 26. Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 27. Owner—The entity named as such in this Agreement and for which Engineer's services are to be performed. Unless indicated otherwise, this is the same entity that will enter into the CMAR Contract concerning the Project.
- 28. Not used.
- 29. Project—The total undertaking to be accomplished for Owner by construction managers, advisors, engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the services to be performed or furnished by Engineer under this Agreement are a part.
- 30. Proposal Documents—Documents related to the selection of the CMAR, including Advertisements for Requests for Qualifications; Requests for Qualifications; Statements of Qualifications, Requests for Proposals; the Proposal form; and including any attachments such as lists of available Site-related documents and other proposal requirements.
- 31. Record Drawings—Drawings depicting the completed Project, or a specific portion of the completed Project, prepared by Engineer and based on CMAR's record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, as delivered to Engineer and annotated by CMAR to show changes made during construction.

- 32. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 33. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for CMAR and submitted by CMAR to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
- 34. Site—Lands or areas to be indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of CMAR.
- 35. Specifications—The part of the Contract Documents that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 36. Subconsultant—An individual, design firm, consultant, or other entity having a contract with Engineer to furnish professional services with respect to the Project as an independent contractor.
- 37. Subcontractor—An individual or entity having a direct contract with CMAR or with any other Subcontractor for the performance of a part of the Work.
- 38. Submittal—A written or graphic document, prepared by or for CMAR, which the Contract Documents require CMAR to submit to Owner, or that is indicated as a Submittal in the Schedule of Submittals accepted by Owner. Submittals may include but are not limited to Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Owner or Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
- 39. Substantial Completion—The time at which the Work, or a specified part thereof, has progressed to the point where the Work, or the specified part thereof, is sufficiently complete, in accordance with the Contract Documents, so that the Work, or the specified part thereof, can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.
- 40. Supplier—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with CMAR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CMAR or a Subcontractor.

- 41. Total Project Costs—The total cost of planning, studying, designing, constructing, testing, commissioning, and start-up of the Project, including Cost of the Work and all other Project construction, labor, services, materials, equipment, insurance, and bonding costs, allowances for contingencies, costs of services of CMAR, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties and private utilities, including relocation if not part of construction costs, Owner's costs for legal, accounting, insurance counseling, and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner.
- 42. Underground Facilities—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
- 43. Work—The entire construction or the various separately identifiable parts thereof required to be provided by CMAR under the Contract Documents, plus the Preconstruction Services of the CMAR. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; 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 Contract Documents.
- 44. Early Work Package Amendment—A document issued by Owner and signed by Owner and CMAR which identifies and defines an Early Work Package and establishes the amount to be paid, times for completion, and any special or supplementary provisions applicable to the authorized Work.
- 45. Work Change Directive—A written directive issued by Owner to CMAR issued on or after the effective date of the CMAR Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.
- 46. Early Work Package—A specific portion of the Work developed by Engineer in collaboration with the CMAR to be undertaken prior to agreement on the GMP Amendment and subsequently authorized by an Early Work Package Amendment.

B. Terminology

1. The word "day" means a period of 24 hours measured from midnight to the next midnight.

ARTICLE 8—EXHIBITS AND SPECIAL PROVISIONS

8.1 Exhibits to Agreement

The following exhibits are incorporated by reference and included as part of this Agreement:

- A. Exhibit A, Engineer's Services.
- B. Exhibit B, Deliverables.
- C. Exhibit C, Reserved.
- D. Exhibit D, Reserved.
- E. Exhibit E, Reserved.
- F. Exhibit F, Reserved.
- G. Exhibit G, Insurance.
- H. Exhibit H, Reserved.
- I. Exhibit I, Reserved.
- J. Exhibit J, Payments to Engineer for Services and Reimbursable Expenses.

8.2 Total Agreement

A. This Agreement, which includes the exhibits listed above, constitutes the entire contractual agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a written instrument duly executed by both parties. Amendments should be based whenever possible on the format of Exhibit C to this Agreement.

8.3 Designated Representatives

A. With the execution of this Agreement, Engineer and Owner shall each designate a specific individual to act as representative under this Agreement. Such an individual must have authority to transmit instructions, receive information, and render decisions with respect to this Agreement on behalf of the party that the individual represents.

8.4 Engineer's Certifications

- A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this Paragraph 8.04:
 - "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the selection process or in the Agreement execution;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition;
 - "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or affect the execution of the Agreement.

- B. Engineer acknowledges that the ethics in public contracting provisions of Sections 2.2-4367 through 2.2-4377 of the Code of Virginia are applicable to all contracts entered into by Owner, including this Agreement, and certifies that it has complied with such provisions in connection with the procurement of this Agreement.
- C. Engineer acknowledges that it has no authority to contract for Owner in any way to bind, to commit Owner to any agreement of any kind, or to assume any liabilities of any nature in the name of or on behalf of Owner. Engineer certifies that under no circumstances shall Engineer, or any of its employees, hold itself out as or be considered an agent or an employee of Owner, and Owner shall not have any duty to provide or maintain any insurance or other employee benefits on behalf of the Engineer or its employees. Engineer certifies, represents and warrants that it is an independent contractor for purposes of federal, state and local employment taxes and agrees that Owner is not responsible to collect or withhold any federal, state or local employment taxes, including, but not limited to, income tax withholding and social security contributions, for Engineer. Any and all taxes, interest or penalties (including, but not limited to, any federal, state or local withholding or employment taxes, and any penalties related to health care or employee benefits laws) that are imposed, assessed or levied as a result of this Agreement or services performed pursuant to this Agreement shall be paid or withheld by Engineer or, if assessed against and paid by Owner, shall be reimbursed by Engineer upon demand by Owner.

8.5 Conflict of Interest

- A. Nothing in this Agreement will be construed to create or impose any duty on the part of Engineer that would be in conflict with Engineer's paramount obligations to the public health, safety, and welfare under the professional practice requirements governing Engineer, its Subconsultants, and all licensed professionals employed by Engineer or its Subconsultants.
- B. If during the term of this Agreement a potential or actual conflict of interest arises or is identified:
 - Engineer and Owner together will make reasonable, good faith efforts to avoid or eliminate the conflict of interest; to mitigate any adverse consequences of the conflict of interest; and, if necessary and feasible, to modify this Agreement to address the conflict of interest and its consequences, such that progress under the Agreement may continue.
 - 2. Such efforts will be governed by applicable Laws and Regulations and by any pertinent Owner's policies, procedures, and requirements, including any conflict-of-interest resolution methodologies, provided to Engineer under Paragraph 2.4.A of this Agreement.

This Agreement's Effective Date is [insert date]. Owner: Engineer: AlexRenew (name of organization) (name of organization) By: By: (individual's signature) (individual's signature) Date: Date: (date signed) (date signed) Name: Name: (typed or printed) (typed or printed) Title: Title: (typed or printed) (typed or printed) Attach evidence of authority to sign. Attach evidence of authority to sign. Attest: ____ Attest: (individual's signature) (individual's signature) Title: Title: (typed or printed) (typed or printed) Address for giving notices: Address for giving notices: **Engineering Manager** 1800 Limerick Street Alexandria, VA 22314 Designated Representative: Designated Representative: Name: _____ Name: (typed or printed) (typed or printed) Title: Title: (typed or printed) (typed or printed) Address: Address:

Phone:

Email:

Phone:

Email:

EXHIBITS TO AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES (WHEN OWNER RETAINS A CONSTRUCTION MANAGER AT RISK)

LIST OF EXHIBITS

Exhibit A	-Engine	eer's S	Services
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Appendix 1—Preliminary Engineering Report - To be attached, See RFP for Document

Appendix 2—Schematic Design (20%) Report - To be Provided

Exhibit B—Deliverables

Exhibit C—Reserved

Exhibit D—Reserved

Exhibit E—Reserved

Exhibit F-Reserved

Exhibit G—Insurance

Exhibit H—Reserved

Exhibit I—Reserved

Exhibit J—Payments to Engineer for Services and Reimbursable Expenses—Introduction

Exhibit J—Payments to Engineer for Services and Reimbursable Expenses

Compensation Packet BC-3—Basic Services—Direct Labor Costs Times a Factor

Compensation Packet AS-2—Additional Services—Direct Labor Costs Times a Factor

Appendix 1—Reimbursable Expenses Schedule

Appendix 2—Standard Hourly Rates Schedule

Appendix 3-Budget Template-Reserved

EXHIBIT A—ENGINEER'S SERVICES

Exhibit A Table of Contents

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Article 1 of the Agreement, Services of Engineer, is supplemented to include the following provisions:

Type and Size of Facility

The City of Alexandria, Virginia Sanitation Authority d/b/a AlexRenew (Owner) was established in 1952 by the Alexandria City Council with a mission to clean wastewater and protect public health and the environment. Owner operates the AlexRenew Water Resource Recovery Facility (WRRF), located at 1500 Eisenhower Avenue, Alexandria, Virginia 22314, providing wastewater treatment service to more than 300,000 people in the City of Alexandria and parts of Fairfax County. The WRRF has a dry-weather design capacity of 54 MGD and can treat up to 118 MGD during wet weather. The WRRF currently treats an average of 38 MGD. The Preliminary and Primary Systems Upgrade Program (Project) will be located at the northeastern corner of the WRRF.

The liquid process facility layout at the WRRF highlighting the preliminary and primary systems is presented in Figure 1.1.

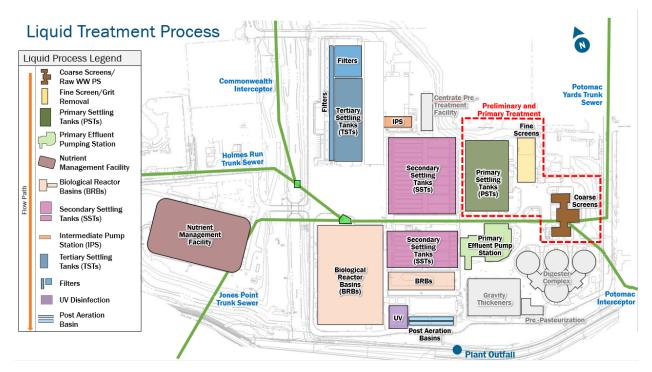


Figure 1.1. AlexRenew's Liquid Treatment Process

Description of Improvements

In August 2020, Owner began assessing the condition and performance of the WRRF's preliminary and primary treatment processes. Several operational, performance, and reliability deficiencies were identified in the coarse screening, influent pumping, fine screening, grit removal, grit and screenings loading, primary settling, and primary scum removal processes. Additionally, many of these components are nearing the end of their useful lives. Upgrading equipment and remediating

deficiencies as soon as possible will mitigate the risks of current equipment failure and systems downtime due to the complexity and age of the equipment. Owner engaged an engineer to develop the AlexRenew WRRF Preliminary/Primary System Upgrades Final Preliminary Engineering Report (PER) dated September 28, 2023, which is incorporated into this document as Appendix 1. The Schematic Design (20%) Report will be incorporated into this document as Appendix 2

Figure 1.2 provides a process flow schematic of the liquid treatment processes at AlexRenew. Raw wastewater first goes through a series of screens and grit separators to remove large solids. Flows are then transported into the primary settling tanks for removal of suspended solids, fats, oils and grease. Screenings and grit are removed from the facility for disposal at the Covanta Waste Energy Facility located in Fairfax, Virginia. After primary settling, the water is pumped to biological reactor basins for nutrient removal and then onto secondary settling tanks. The next step of tertiary treatment includes settling tanks, filters, and UV disinfection, before going through post-aeration and discharging to Hunting Creek.

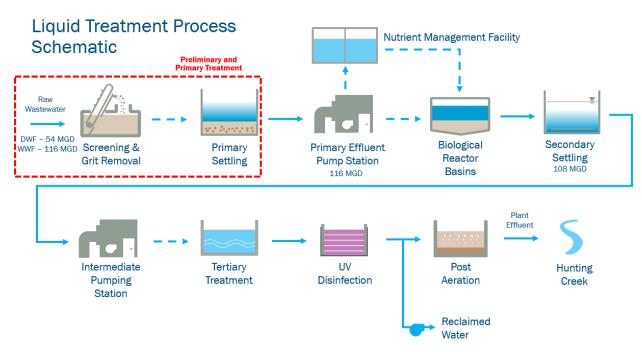


Figure 1.2. AlexRenew's Liquid Treatment Process Flow Schematic

AlexRenew determined that a collaborative delivery method would be the most practicable means to perform these upgrades due to the necessity, timing, and complexity of the tasks, working in and around active systems, and ensuring the safety of operations and maintenance teams. Table 1.1 provides a summary of currently anticipated upgrades identified in the PER to be performed as part of the Project.

Table 1.1 Description of Work as Identified in the PER

Component Description	
-----------------------	--

D. W. C	
Primary Weir Observation House (PWOH)	Refurbish the existing building including metal roof panels, structural steel supports and other steel components, building lighting, electrical equipment and conduits, and odorous air piping
Primary Settling Tanks (PST)	Replace influent baffles, slide gates, scum skimmers, and handrails, and relocate an existing walkway
Primary Settling Tanks	Concrete and metal support repair or replacement for the primary
Effluent Channel	settling tanks' effluent channel and control structures
Coarse Screening	Add a new coarse screening influent channel including channel
	isolation gates which requires an expansion of the existing building
	Replace two (2) existing screens to include new washer/compactor
	units and discharge chutes for each screen
	Miscellaneous improvements to the coarse screening system
Raw Sewage Pumping	Replace six (6) existing raw sewage pumps with new dry-pit
Station (RSPS)	submersible pumps and new concrete pedestals
	Upgrade the VFDs, valves, and instrumentation control
	Wet well and pump room enhancements
RSPS Suction and Discharge	Interior surface coating of wet wells, suction conduits, and concrete
Structures	portion of discharge conduits. Determining inspection and rehabilitation
	services
Fine Screening	 Replace four (4) existing screens replacement and provision of four (4) new screens with washer/compactors and instrumentation and controls
	Replace two (2) existing fine screens transfer conveyors
	Install two (2) new fine screenings transfer conveyors
	Concrete coating on the screen channels removal and replacement
Conveyors and Loading	Provide two (2) roll-off containers on an automated rail system with new discharge ports for fine screening and grit loading
	Install four (4) new shaftless fine screenings screw conveyors
	Install two (2) new shafted grit screw conveyors
Primary Scum	Upgrades to the primary scum system, sludge pumping system
	including piping and valve replacements
Grit Removal	Replace two (2) existing vortex grit separators and associated pumps
	with two (2) new vortex grit separators with the V-Force baffle and
	pumps
	Replace two (2) existing vortex grit separators and associated pumps
	with three (3) new stacked tray grit removal units and pumps
	Replace associated grit piping with abrasion resistant materials
	 Replace four (4) existing grit classifiers with four (4) new grit washers
	and provide new equipment platform
	Construct new dewatering equipment access stairs and platform

Expected Project Cost and Schedule

The capital cost of the Project is currently estimated at \$80 million. Figure 1.3 illustrates the anticipated overall Project schedule.

Activity	2023	2024	2025	2026	2027	2028	2029
Procurement (CMAR)							
Procurement (Engineer)							
Design	Schematic -		Final				
Construction							

Figure 1.3 Anticipated Project Schedule

Engineer shall provide Basic and Additional Services as set forth below:

ARTICLE 1— BASIC SERVICES

1.1 Management of Engineering Services

- A. All phases of Engineer's services will include management of Engineer's Project-specific responsibilities, including but not limited to the following management tasks, whether separately tracked and itemized or included as being incidental to other phase and scope task items.
 - 1. Develop and submit an Engineering Services Schedule. The Engineering Services Schedule will:
 - a. be consistent with and serve as a supplement to the Schedule of Deliverables set forth in Exhibit B.
 - b. be updated on a regular basis, and as required to reflect any programmatic decisions by Owner.
 - c. include, but not be limited to, an anticipated sequence of tasks; estimates of task duration; interrelationships among tasks; milestone meetings and submittals; anticipated schedule of construction; and other pertinent Project events.
 - 2. Develop and submit detailed work plans from Exhibit A tasks.
 - 3. Coordinate services within Engineer's internal team, and with Subconsultants and Engineer's Subcontractors.
 - Prepare for and participate in meetings with consultants and contractors working on other parts of the Project that may affect, or be affected by, Engineer's services or resulting construction.
 - 5. Participate in a training session on Owner's Construction Management Information System (CMIS), e-Builder. Two employees will be trained. It is assumed that AlexRenew will provide access to the CMIS with no license fees or user fees.
 - 6. Collaborate with Owner during all phases of Engineer's services. Collaborate with Construction Manager at Risk commencing with their selection.
 - 7. All references to collaboration between Engineer and Owner will include collaboration with CMAR if the CMAR has been engaged.
 - 8. Prepare and submit monthly engineering services progress reports to the Owner. The monthly report must be submitted through Owner's CMIS. The report will document

- activities performed during the period, expected progress next period, description of major issues or concerns, provide an updated organization chart, describe staffing changes, and discuss any budget changes or forecasts.
- 9. Special Invoicing—In addition to, or as a substitute for, Engineer's standard invoicing, provide the specified additional information or documentation, including a full accounting of all staff, number of hours, loaded hourly rates, subconsultants, and other direct costs (ODCs). The Engineer shall invoice for services performed, reporting and forecasting costs to Owner at the task level. The Engineer shall collect costs and maintain forecasts to the lowest level of the Scope of Services (i.e., the task or subtask level) and shall provide this information when requested by Owner.
- 10. Conduct ongoing management tasks, including:
 - a. Maintaining communications records and files pertaining to or arising from Engineer's services;
 - b. With respect to Engineer's services and other directly relevant parts of the Project, prepare for and participate in periodic progress meetings with Owner, and if applicable with CMAR, to discuss progress, schedule, budget, issues, potential problems, and their resolution; and
 - c. Preparing agendas prior to and minutes following all Engineer-led meetings.
- B. Engineer's Basic Services, and the management of such services, are based on the condition that the Work designed or specified by Engineer will be performed under a single GMP Amendment encompassing the entirety of Construction Services, for construction of the Work described in the Owner-CMAR Contract.
- C. In all phases of Engineer's services, Engineer shall prepare draft and final Drawings in accordance with Owner's CAD standards using AutoCAD Civil 3D, Revit and Navisworks 2018 version software or later.
- D. The source documents for the draft and final Specifications in all phases of Engineer's services will be Owner's standard specifications, unless otherwise mutually agreed upon by the parties.

1.2 Reserved

- 1.3 Preliminary Design Phase
 - A. Owner is developing a Schematic Design (20%) Report, to be incorporated here as Appendix 2.
 - B. During the Preliminary Design Phase, Engineer shall:
 - Review and assess all available Project information and data, including any pertinent reports or studies, whether prepared by Engineer or others, and any related instructions from Owner.
 - 2. Based on the threshold review and assessment of available information and data, advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer any additional information and data, for Engineer's use in the understanding of the Schematic Design Report.
 - 3. Advance Schematic Design (20%) to Preliminary Design (30%).

- 4. The Preliminary Design will consider the following matters to the extent applicable to the Project and as necessary to establish shared understanding for proceeding to final design and construction:
 - a. The Project concept, intent, performance criteria, desired outcomes, Owner's standards and Owner-directed improvements and facility elements as established in the Schematic Design (20%) Report (Appendix 2) (collectively the Project Goals).
 - b. Review existing and recommend additional design criteria for each primary portion and significant discipline of the design necessary to address the Project Goals.
 - c. Site conditions and characterization as known at the time of, or to be determined during, the Preliminary Design Phase, including topography; subsurface information; Constituents of Concern; cultural, historical, and archaeological resources at the Site; wetlands information; and evaluations of flora and fauna that may be affected by the Project.
 - d. The time schedule for completion of the Project in accordance with Project Goals, including any recommended changes to the time required to complete the Final Design Phase, as set forth in Exhibit B, Deliverables Schedule, and estimated schedule(s) for construction.
 - e. Identification of major items of materials and equipment, rationale for selection with consideration of quality, suitability, pricing, sourcing, regulatory, and bidding issues affecting recommended selection and recommend equipment for pre-purchase.
 - f. Preliminary information or instructions from Owner regarding fast tracking or Early Work Packages.
 - g. Revised opinions of probable Cost of the Work.
 - h. The impact of Project Strategies, Technologies, and Techniques selected by Owner for inclusion in the Project on the Project Goals, schedule, and probable Cost of the Work, including impact of multiple Early Work Packages, separate procurement of materials or equipment, and other alternate project delivery methods when the Project Goals necessitate, and Owner authorizes.
 - i. Construction Phase quality assurance and quality control needs affecting development of Drawings and Specifications and other Final Design documents.
 - j. The effect of permits and authorizations by other entities and utility coordination needs on the Project.
 - k. Other matters and information pertinent to addressing the Project Goals.
- 5. In preparing the Preliminary Design (30%) Report, use any specific applicable Project Strategies, Technologies, and Techniques authorized by Owner in the PER (Attachment AA) or Schematic Design (20%) Report (Attachment BB), and include sustainable features and enhanced resiliency, as appropriate, pursuant to Owner's instructions.

- 6. Visit the Site as needed to prepare the Preliminary Design (30%) Report.
- 7. If at any point in the Preliminary Design Phase it becomes apparent to Engineer that additional reports, data, information, or services of the types described in Article 2 are necessary, then so advise Owner, and assist Owner in obtaining such reports, data, information, or services.

8. Above-Ground Utilities

- a. Review above-ground utilities information obtained from Owner and from observations at the Site.
- b. Make recommendations regarding any further identification, investigation, and mapping of above-ground utilities at or adjacent to the Site, for Engineer's design purposes or otherwise.
- c. Account for above-ground utilities, based on available information, when advancing design during the Preliminary Design Phase.

9. Underground Facilities

- a. Review Underground Facilities data furnished by Owner. Assist Owner in reducing and managing risks associated with Underground Facilities by working together with Owner to jointly establish a procedure ("Underground Facilities Procedure") for the further identification, investigation, and mapping of Underground Facilities at or adjacent to the Site, using ASCE 38-22, "Standard Guideline for Investigating and Documenting Existing Utilities" and ASCE 75-22 "Standard Guideline for Recording and Exchanging Utility Infrastructure Data" as a basis for establishing such Underground Facilities Procedure.
- b. Such Underground Facilities Procedure must consider the Site and the nature of the Project.
- c. Use the Underground Facilities Procedure to aid in the performance of design services:
 - 1) Account for Underground Facilities, based on available information, when advancing the design during the Preliminary Design Phase.
 - 2) The Underground Facilities Procedure will include a plan to keep Underground Facilities information current as Engineer proceeds with the provision of design services, and to add new or relocated Underground Facilities information to the base utility or Site drawings.
 - 3) To manage the potential impact of design changes on Underground Facilities, Engineer shall work together with Owner to modify or reapply the Underground Facilities Procedure as the design progresses and changes.

10. Mitigation of Utilities Conflicts

a. Identify potential conflicts between the Project, including existing and new facilities and structures, and above-ground utilities and Underground Facilities as reviewed in Exhibit A, Paragraphs 1.3.B.8 and 9 above, and advise Owner regarding the need for resolution of such conflicts with utility and Underground Facilities owners and permit agencies. Identify the potential need for the relocation of existing above-ground utilities and Underground Facilities.

- b. Update the Underground Facilities Procedure as necessary for any Underground Utilities conflicts and relocations.
- c. Working together with Owner, jointly identify which specific parties or other entities will be responsible for implementation of the various specific parts of the Underground Facilities Procedure, including those parts that address resolution of Underground Facilities conflicts, and for resolution of aboveground utilities conflicts. Such identification will consider Owner's authority and standing, as owner of the Site, with respect to Underground Facilities and above-ground utilities.
 - To the extent that Owner and Engineer agree that in addition to performing the design-related obligations set forth in Exhibit A, Paragraphs 1.3.B.8 and 9, Engineer will also implement any non-design part of the Underground Facilities Procedure, including resolution of Underground Facilities conflicts, or undertake resolution of above-ground utilities conflicts, such additional duties will be Additional Services under Article 2 of this Exhibit A.

11. Surveys, Topographic Mapping, and Utility Documentation

- a. Coordinate with Owner for the necessary field surveys, topographic mapping, and utility documentation required for Engineer's design purposes, or by the Underground Facilities Procedure.
- b. If no scope of work and procedure for utility documentation has been established, selected, or authorized, then at a minimum Engineer will contact utility owners and obtain available information. Except as otherwise provided in this Agreement, Owner acknowledges that the information gathered from utility owners may be incorrect, incomplete, outdated, or otherwise flawed, and as to Engineer the Owner accepts all associated risks. Owner reserves all associated rights as to recourse against the sources of such flawed information and against third parties.
- 12. In collaboration with Owner prepare an initial draft of a comprehensive permit document that identifies Owner's, CMAR's, and Engineer's permit duties, and the schedule for permitting activities.
- 13. Continue to assist Owner with Project Strategies, Technologies, and Techniques that Owner has chosen to implement in the PER (Attachment AA) and Schematic Design (20%) Report (Attachment BB).
- 14. Review information, if any, from Owner regarding Proposal Documents, Front-End Contract Documents, and other items relating to the procurement and selection of the CMAR, all being prepared, managed, administered, and implemented by Owner, with respect to effects on the Project design, schedule, and construction, and take such information into account as needed in the Preliminary Design Phase deliverables.
- 15. Upon request by Owner, provide to Owner (a) information regarding the status of the Preliminary Design Phase services, and (b) available engineering and technical information relevant to the CMAR selection process.
- 16. Prepare for inclusion in the Preliminary Design (30%) Report a list of the Divisions 02-49 Specifications sections expected to be included in the final design.

- 17. In general, Owner will prepare Division 01, General Requirements, of the Specifications, including primary drafting of those General Requirements sections concerning procedural and administrative matters with which Owner or CMAR will be involved during construction. Such procedural and administrative sections may include, by way of typical example only, those General Requirements sections regarding applications for payment, project management and coordination, document management, work restrictions, temporary facilities and controls, construction progress schedule, submittal procedures, and execution and closeout requirements.
 - a. As part of its General Requirements drafting responsibilities, Owner will prepare and furnish to Engineer a preliminary draft of the General Requirements document. This document will identify any necessary engineering, technical, or design-related input needed from Engineer, and those sections (or portions of sections) of the General Requirements that Engineer is requested to prepare, because of the relationship of such sections (or portions of sections) to the design itself, to Engineer's design concept, or to Engineer's contractual responsibilities.
 - b. Engineer will review the preliminary draft and the requested tasks and identify any additional engineering input and sections (or portions of sections) that Engineer recommends be included in the General Requirements.
 - c. Engineer will forward to Owner any potentially relevant information obtained from Owner regarding constraints or requirements applicable to the General Requirements.
 - d. If Owner consults with Engineer regarding any aspect of the procedural and administrative General Requirements that may relate to the project design, Engineer will provide appropriate engineering input.
 - e. With respect to the General Requirements sections or portions of sections to be prepared by Engineer, the Engineer will consult with Owner regarding matters addressed in such Specifications that may be relevant to Owner's and CMAR's scope of services during construction and obtain Owner's input.
 - f. Engineer will prepare and provide the requested input and draft sections (or portions of sections) of the General Requirements to Owner. Owner and Engineer will work collaboratively toward completion of the General Requirements.
 - g. Owner will make final revisions regarding procedural and administrative matters, incorporate content from Engineer, and assemble the final drafts of all General Requirements sections of the Specifications.
 - h. Owner will distribute the General Requirements in final form to CMAR.
 - i. Engineer is not responsible for the quality of the content of the Division 01 Specifications sections (General Requirements) prepared by Owner, and Owner does not require that Engineer certify or seal such Specifications sections. Engineer remains responsible for those sections or portions of sections of Division 01 prepared by Engineer and incorporated by Owner in the final drafts.

- 18. Prepare the Preliminary Design Report. This Report will consist of, as appropriate, separate or combined submittals, in whole or summary, of the Preliminary Design (30%) Phase documents listed in Exhibit A, Paragraph 1.3.B.4, and Engineer's findings and recommendations for advancing the Project to the Final Design Phase, including Engineer's findings and recommendations, if any, regarding permitting, utilities, and Underground Facilities. The submittal will be in the format of a Technical Memorandum, or otherwise organized and assembled for ease and practicality of use.
 - a. Engineer will meet with Owner to discuss the draft Report submittal and receive Owner's comments.
 - b. If Owner has already awarded the Contract to a CMAR, then Owner may elect to transmit the draft Report to CMAR for review, noting that it is a draft and that a final Preliminary Design (30%) Report will follow.
- 19. Perform or provide the following other Preliminary Design Phase tasks or deliverables:

a. Reserved

- 20. Furnish the Report and any other Preliminary Design Phase deliverables to Owner pursuant to the requirements of the Deliverables Schedule in Exhibit B and review the deliverables with Owner.
- 21. Revise the Report and any other deliverables in response to Owner's comments, as appropriate, and submit revised deliverables pursuant to the Deliverables Schedule.
- C. In providing services under the Preliminary Design Phase, the Engineer will assume that in the Final Design Phase that follows, the scope of CMAR's Work will be divided into multiple Early Work Packages, which will subsequently be authorized for construction in Early Work Package Amendments and the GMP Amendment, using fast-track design/construction strategies. Engineer's Preliminary Design Phase services should avoid actions that would reduce the CMAR's, Owner's, and Engineer's flexibility in structuring the Early Work Packages and establishing fast-track strategies during the next phase of services.
- D. Engineer's services under the Preliminary Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Preliminary Design (30%) Report and any other Preliminary Design Phase deliverables.

1.4 Final Design Phase

A. After acceptance by Owner of the Preliminary Design Phase deliverables; issuance by Owner of any instructions for specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner; and any necessary changes, refinements, and supplementation of the Baseline Information set forth at the beginning of this Exhibit A, Engineer and Owner will await receipt of CMAR's priority input and advice regarding the Preliminary Design (30%) Report's content concerning coordination of utilities work, both above-ground utilities and Underground Facilities, Underground Facilities Procedure, and mitigation of utilities conflicts, and CMAR's recommendations regarding Early Work Packages, the GMP Amendment and fast-tracking.

- B. The Work designed or specified by Engineer may be performed or furnished by Subcontractors to the CMAR, or on a self-perform basis by CMAR, under multiple Early Work Packages. Upon Owner's receipt of CMAR's recommendations regarding Early Work Packages and fast-tracking, Owner, CMAR, and Engineer, working collaboratively, will finalize the number of Early Work Packages and their approximate scope, and the schedule for preparation, authorization, and completion of such Early Work Packages. The same process shall apply to Work covered by the GMP Amendment.
- C. During the Final Design Phase, Engineer shall:
 - Work with Owner to develop a revised schedule for performance of Engineer's services during the Final Design, Construction, and Post-Construction Phases in order to properly sequence and coordinate such services, especially with respect to design revisions, if any, needed in response to coordination of utilities work, both aboveground utilities and Underground Facilities, Underground Facilities Procedure, and mitigation of utilities conflicts, and regarding the finalization of the number, scope, and schedule for multiple Early Work Packages and the GMP Amendment.
 - 2. Discuss, resolve, and document in an Amendment to this Agreement, if needed, the revisions to Engineer's scope of services, compensation, and the time for completion of Engineer's services, resulting from: (1) specific modifications to the Project, (2) changes, refinements, or supplementation of the Baseline Information; (3) the revised schedule for Engineer's services developed under Paragraph C.1, (4) CMAR input and advice regarding coordination of utilities work, both above-ground utilities and Underground Facilities, Underground Facilities Procedure, and mitigation of utilities conflicts, and the resulting need for design revisions; and (5) CMAR's recommendations regarding Early Work Packages and fast-tracking.
- D. Upon written authorization from Owner, Engineer shall prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by CMAR, in accordance with the Preliminary Design Phase deliverables. In preparing such final Drawings and Specifications, Engineer shall consider any Amendments to this Agreement; CMAR's priority input and advice regarding coordination of utilities work, both above-ground utilities and Underground Facilities, Underground Facilities Procedure, and mitigation of utilities conflicts; and the results of the Cost of the Work review, constructability, and value engineering processes described in Exhibit A, Paragraph 1.4.G.8 below. As part of the preparation of the Drawings and Specifications, Engineer shall prepare interim drafts and final Drawings and Specifications as follows, pursuant to the Deliverables schedule in Exhibit B:
 - 1. First Final Design Phase (60%). First draft of all Drawings and Specifications.
 - Second Final Design Phase (90%). Draft of all Drawings and Specifications, addressing Owner and CMAR comments, as appropriate, and including appropriate design advancement. This shall be considered the set of drawings that will be used for permitting purposes.
 - Final Draft (100%). Final draft of all Drawings and Specifications, addressing Owner and CMAR comments, as appropriate, and including appropriate design advancement for final review.
 - Release for Construction (100%). Final Drawings and Specifications that address Owner and CMAR comments, as appropriate; are suitable for estimating and pricing

by prospective construction contractors; and are complete and ready for construction.

- E. In preparing the Specifications, and any other documents that are part of Engineer's scope of services, Engineer shall obtain from Owner or Owner's legal counsel any relevant constraints such as requirements for use of domestic steel and iron, other domestic purchasing requirements, statutory restrictions on utilizing proprietary specifying methods, and the like, and comply with or account for such constraints in drafting the Specifications and other Project documents.
- F. During the Final Design Phase, the Engineer shall continue to account for above-ground utilities and Underground Facilities as the design advances and is finalized. This will include:
 - Review and analysis of input and advice from CMAR, based on CMAR's priority review
 of the Schematic Design Report, regarding coordination of utilities work, both aboveground utilities and Underground Facilities, Underground Facilities Procedure, and
 mitigation of utilities conflicts, and performing the services assigned to Engineer
 under the Underground Facilities Procedure described in Exhibit A, Paragraph 1.3
 above, including but not limited to the design-related tasks in Exhibit A,
 Paragraph 1.3.B.9.
 - 2. Addressing required and proposed activities or mitigations identified in the analysis of utilities and by the Underground Facilities Procedure as having an impact on the final design and considering such in preparing the Drawings and Specifications.
- G. Engineer shall perform or furnish the following other Final Design Phase services:
 - 1. Visit the Site as needed, at least once per submittal, to assist in preparing the final Drawings and Specifications.
 - 2. Assist with or prepare applications for permits and approvals, as follows:
 - a. Update the comprehensive permit document created in Preliminary Design Phase for Final Design detail.
 - b. Prepare the following applications for and, following Owner's review and approval, submit to authorities having jurisdiction over the construction or operation of the Project. To include, as needed, Building Permits, Certificate to Construct, Certificate to Operate, Stormwater Permits, and Develop Special Use Permit applications:

1) Reserved.

- c. Confer with Owner regarding revisions, if any, to the application(s), and make appropriate revisions to the application(s) for resubmittal to the authority having jurisdiction.
- d. Provide technical criteria, written descriptions, and design data for use in filing applications for permits from or approvals of the jurisdictional authorities, including applications for review or approval of the final design.
- e. Identify and indicate in the CMAR Contract Documents the permits and approvals for which CMAR will be responsible, including work permits, building permits, and other permits and approvals that will be CMAR's responsibility;

- and, in addition, indicate those permits initially obtained by Owner for which CMAR will be a co-permittee, together with associated requirements.
- f. Unless expressly indicated otherwise, Engineer's scope and budget includes attending one meeting or conference call with each permit and approval-issuing agency to discuss the Project and receive the agency's comments on the application.
- g. Engineer does not guarantee issuance of any required permit or approval.
- h. Fees charged by authorities having jurisdiction for such permits or approvals are the responsibility of Owner.
- 3. Owner, CMAR, and Engineer will participate in a collaborative process with respect to the determination of probable Cost of the Work during the Final Design Phase:
 - a. At the commencement of the Final Design Phase the Owner will furnish a copy of the Preliminary Design (30%) Report to CMAR.
 - b. CMAR will review the design information presented in the Preliminary Design and prepare CMAR's own independent opinion of the Cost of the Work based on such design information. If CMAR's independent opinion of probable Cost of the Work differs substantially from the opinion of probable Cost of the Work in the Preliminary Design, CMAR will confer with Owner regarding CMAR's cost opinion, investigate the reasons for the difference and confirm the cost opinion or, if appropriate, modify such opinion.
 - c. Promptly after Engineer submits the First Final (60%) Design draft (Exhibit A, Paragraph 1.4.D.1) and subsequently after submittal of the Second Final Design (90%) Phase draft (Exhibit A, Paragraph 1.4.D.2), CMAR will update its opinion of probable Cost of the Work based on the interim design set forth in the draft.
 - d. Engineer will review the opinions of probable Cost of the Work prepared by the CMAR, and provide comments based on information obtained during the design.
 - e. Owner will monitor opinions of probable Cost of the Work and provide Owner's perspective to Engineer.
 - f. Unless instructed otherwise by Owner, Engineer may rely on the CMAR's Cost of the Work opinions and will take such opinions into account as Engineer finalizes the design.
- 4. Assist Owner in assembling known reports and drawings of Site conditions, and in identifying the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.
- Review the preliminary schedule for the Construction Phase prepared by the CMAR, in consultation with Owner, and advise Owner of impacts on the schedule for preparing the Drawings and Specifications.
- 6. Engineer's project manager and other appropriate staff will participate in the following meetings and conference calls:
 - a. First draft design review meeting at Owner's office.

- b. Second draft design review meeting at Owner's office.
- c. Final draft design review at Owner's office.
- d. Other meetings as designated by Owner.
- e. Engineer will prepare and distribute minutes of each such meeting and conference call, indicating attendees, topics discussed, decisions made, and action items for follow-up.

7. Constructability review performed by CMAR:

- a. Prescribe the processes and procedures to be used by CMAR to make review comments with respect to the in-progress design documents under review.
- b. Provide qualified and timely input, response, and advice on one set of constructability review recommendations presented by the CMAR during the Final Design Phase.
- c. If the constructability review recommendations suggest revisions to the Drawings or Specifications, revise the Drawings and Specifications to the extent such recommendations are acceptable and revisions are appropriate, in Engineer's professional judgment, based on consistency with the Engineer's design intent, sound engineering practices, and Engineer's professional obligations.

8. Value Engineering

- a. In collaboration with Owner and CMAR, participate in a Value Engineering review at the completion of the first draft of the Final Design Phase documents (approximately 60% completion) to assist in identifying ways to improve value to the Owner or reduce costs. Such studies will identify potential design changes which could reduce construction costs or increase the value of the Project by more than the cost of implementing such changes. The cost of implementing changes will include design fees to be paid to the Engineer for making such changes. Engineer will furnish such estimated design cost information to Owner.
- b. Evaluate proposed alternatives in value engineering studies for overall cost, ability to implement the changes, technical analysis, and the impact of changes on the overall Project. Engineer will present the technical and economic analysis to the Owner and CMAR for their consideration, in a draft Value Engineering Technical Memorandum (TM). Engineer will consolidate comments and issue the final TM which will include Engineer's opinion as to the merit of the proposed changes, and Engineer's estimated fee to implement the proposed changes.
- c. As directed by Owner, revise the final design to incorporate value engineering proposals accepted by Owner, provided the design changes will be consistent with the Engineer's design intent, sound engineering practices, and Engineer's professional obligations.
- 9. Perform or provide the following other Final Design Phase activities or deliverables:

a. **Reserved**

- H. Engineer shall complete the Final Design Phase as follows:
 - Pursuant to the requirements of the Deliverables schedule in Exhibit B, furnish for review by Owner, its legal counsel, and other advisors, the final Drawings and Specifications (as set forth in Exhibit A, Paragraph 1.4.D.3 above); review and comment on the most recent opinion of probable Cost of the Work; and any other Final Design Phase deliverables, and review the deliverables with Owner.
 - Revise the Final Design Phase deliverables in response to Owner's and other's comments, as appropriate, and submit revised deliverables pursuant to the Deliverables Schedule.
 - Engineer's services under the Final Design Phase will be considered complete on the date when Engineer has delivered to Owner the Final Design Phase deliverables, as revised.

1.5 Construction Procurement Phase

- A. When the design, or a specific portion of the design, is ready for CMAR to present to prospective Subcontractors for pricing, or in the case of CMAR self-performance of Work, for pricing by CMAR, CMAR will conduct a construction procurement process to select qualified Subcontractors and identify and commit to CMAR self-performance for those aspects of the design for which the CMAR will self-perform. During CMAR's construction procurement process, Engineer shall:
 - Provide information, responses, technical descriptions, or assistance requested by CMAR or Owner in the course of preparing or reviewing bidding-related documents or requests for proposals, or in their review of requests for information, bids, proposals, or negotiations with prospective Subcontractors, as related to the final design documents prepared by or for the Engineer, or as related to engineering or other technical matters.
 - Clarify, correct, or change the final design documents prepared by or for Engineer in response to questions raised by prospective Subcontractors and transmitted to Engineer by CMAR. Addenda used in CMAR's construction procurement process will be issued by CMAR.
 - 3. Evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by prospective Subcontractors and transmitted to Engineer by CMAR, provided that the CMAR's construction procurement process allows such proposals prior to award of subcontracts for the Work. Services under this paragraph are subject to the provisions of Exhibit A, Paragraph 2.1.A.2.
 - 4. Perform or provide the following other tasks or deliverables in support of CMAR's construction procurement process:

a. Reserved

5. This Phase will be considered complete upon CMAR's award of construction subcontracts for the Work.

1.6 Construction Phase

A. Upon issuance by Owner of the first Early Work Package Amendment or GMP Amendment, whichever occurs first, and after issuance by Owner of any instructions to Engineer or

CMAR for specific modifications or changes in the scope, extent, character, design, schedule, number of Early Work Packages, and other construction requirements of the Project during the Construction Phase desired by Owner, the Engineer and Owner shall discuss, resolve, and document any necessary revisions to Engineer's scope of services or compensation, through an Amendment or application of the provisions regarding Additional Services, or otherwise, or the time for completion of Engineer's services, resulting from specific modifications to the Project.

- 1. Engineer shall be responsible only for those Construction Phase services expressly required of Engineer in Exhibit A. Paragraph 1.6, as duly modified.
- 2. Owner waives all claims against Engineer and its officers, directors, members, partners, agents, employees, and Subconsultants, and Engineer's Subcontractors, that may be connected in any way to Construction Phase administrative, engineering, or professional services except for those services that are expressly required of Engineer in Exhibit A. Notwithstanding the foregoing waiver, Engineer shall be responsible for any professional opinions and interpretations provided by Engineer to Owner during the Construction Phase or Post-Construction Phase, including interpretations or clarifications of the Contract Documents.
- B. While construction is occurring, Engineer shall provide the following services:
 - Engineer's services in support of the General Administration of CMAR Contract— Consult with Owner and CMAR as provided in this Agreement and the CMAR Contract. Unless otherwise set forth in the scope of Basic Services, as duly modified, the extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned in the applicable General Conditions for the Construction Manager at Risk Contract.
 - a. Except as otherwise provided in the CMAR Contract, Owner's communications to CMAR will be issued through Owner.
 - b. If the construction-related responsibilities of Engineer as set forth in the CMAR Contract are greater than those Construction Phase services expressly required of Engineer in Exhibit A, Paragraph 1.6, as duly modified, then Owner shall either (1) expand the scope of the Construction Phase services to match those of the CMAR Contract, and compensate Engineer for any related increases in the cost to provide Construction Phase services, pursuant to the provisions for compensating Additional Services, or (2) identify a qualified individual or entity, other than Engineer, responsible for the additional responsibilities in the CMAR Contract.
 - c. If Owner, or Owner and CMAR, modify the construction-related duties, responsibilities, and authority of Engineer in the CMAR Contract, or modify other terms of the CMAR Contract having a direct bearing on Engineer, or if Owner requires Engineer's services for construction that extends longer than the anticipated CMAR Contract Times, then Owner shall compensate Engineer for any related increases in the cost to provide Construction Phase services, pursuant to the provisions for compensating Additional Services.
 - d. Engineer shall not be required to furnish or perform services contrary to Engineer's responsibilities as a licensed professional.

- Pre-Construction Conference—Participate in a pre-construction conference prior to commencement of Work at the Site; prepare notes regarding items which might require clarification or modifications to the Contract Documents; attend initial conferences associated with each subsequent Early Work Package Amendment and the GMP Amendment.
- 3. Electronic Transmittal Protocols—If the CMAR Contract does not establish protocols for transmittal of Electronic Documents by Electronic Means, then Owner, Engineer, and CMAR shall jointly develop such protocols.
- 4. Signed and Sealed Documents—Provide to Owner at least one record version of the Drawings and Specifications, signed and sealed by Engineer and other design professionals in accordance with applicable Laws and Regulations, for Owner to maintain and safeguard during the Construction Phase. Provide an additional 5 half-size sets and 2 full-size sets of record drawings for file.
- 5. Schedules—Receive from Owner, for Engineer's information only, copies of accepted schedules that CMAR has submitted to Owner, including the progress schedule, schedule of submittals, and schedule of values.
- 6. Permits—Provide Owner with copies of technical information and supporting data previously obtained or developed by Engineer for Owner's use in obtaining permits and licenses, or for Owner to provide to CMAR for its use in obtaining required permits and licenses delegated to CMAR by Owner.
- 7. Visits to Site and Observation of Construction. In connection with observations of CMAR's Work while it is in progress:
 - a. Periodic Site visits. Make visits to the Site on a monthly, or as needed, basis to observe, as an experienced and qualified design professional, the CMAR's executed Work. Such periodic visits are included in Basic Services.
 - b. Periodic attendance at progress meetings. Attend periodic construction progress meetings at the Site, as an observer and to furnish engineering/technical support. Such meetings will be held on a monthly basis, and Engineer's attendance on that basis is included as part of Basic Services.
 - c. Additional site visits. Make visits to the Site (1) as requested by the Owner, and (2) as necessitated by Engineer's status as engineer of record. All visits made upon request of Owner, or as engineer of record, and all periodic site visits or attendance at progress meetings in excess of those included as Basic Services in Exhibit A, Paragraphs 1.6.B.7.a and b, will be Additional Services pursuant to Exhibit A, Paragraph 2.2.A.33.
 - d. Such visits and observations by Engineer, whether periodic or additional, or in connection with construction progress meetings, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Engineer will make a report of each visit to the Site, summarizing Engineer's general observations and any significant findings.
 - e. The purpose of Engineer's visits to the Site, if any, or attendance at meetings at the Site, if any, will be to enable Engineer to better carry out the limited duties

and responsibilities assigned to it by this Agreement and undertaken by Engineer during the Construction Phase. Engineer will not, during such visits or meetings, or as a result of any observations of the Work, supervise, direct, or have control over the Work, nor will Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Contract Documents.

- 8. Defective Work—If, on the basis of Engineer's observations or as indicated in documentation available to Engineer, Engineer believes that any part of the Work is defective under the terms and standards set forth in the Contract Documents, Engineer will immediately issue written notice to Owner of such defective Work. Such notice will communicate the scope, extent, to Engineer's understanding, of the defect, and associated provisions of the Contract Documents.
 - a. Provide recommendations to Owner regarding whether CMAR should correct such Work or remove and replace such Work, or whether Owner should consider accepting the defective Work in accordance with the provisions of the Contract Documents. Owner will give notice to CMAR regarding whether the defective Work should be repaired, replaced, or will be accepted by Owner.
 - b. However, Engineer's authority to provide this information to Owner, or Engineer's decision to exercise or not exercise such authority, will not give rise to a duty or responsibility of the Engineer to CMAR, its Subcontractors, material and equipment suppliers, their agents or employees, or any other person(s) or entities performing any of the Work, including but not limited to any duty or responsibility for CMAR's or Subcontractors' safety precautions and programs incidental to the Work.
- 9. Compatibility with Design Concept—If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Contract Documents is nonetheless not compatible with the design concept of the completed Project as a functioning whole, then inform Owner immediately of such incompatibility, and provide recommendations for addressing such Work.
- 10. Clarifications and Interpretations—Accept from Owner submittal of all matters duly brought into question by either Owner or CMAR concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents.
- 11. Non-reviewable Matters—If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Contract Documents that do not involve (a) the performance or acceptability of the Work under

- the Contract Documents, (b) the design, as set forth in the Drawings, Specifications, or otherwise, or (c) other engineering or technical matters, then Engineer will promptly give written notice to Owner that Engineer will not provide a decision or interpretation.
- 12. Field Orders—Subject to any limitations in the Contract Documents, at the request of Owner the Engineer will review and approve Field Orders requiring minor changes in the Work.
- 13. Change Orders and Work Change Directives—Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.
- 14. Change Proposals and Claims
 - a. Review and respond to Change Proposals. Review each Change Proposal received from Owner and, within 30 days after receipt of the CMAR's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions must be in writing, with a copy provided to Owner. If the Change Proposal does not involve the design, as set forth in the Drawings, Specifications, or otherwise, the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the Owner that the Engineer will not address the Change Proposal.
 - b. Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.
- 15. Differing Site Conditions—Respond to any CMAR notice of differing site conditions forwarded by Owner's, including notices of conditions relating to Underground Facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Owner's use, subject to limitations of Engineer's obligations under this Agreement.
- 16. CMAR's Submittals—Review and approve or take other appropriate action with respect to required CMAR Submittals presented to Engineer by Owner's, but only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and for compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any duly accepted CMAR's Submittal schedule providing a workable arrangement for Engineer's review and processing of the required Submittals.
- 17. Substitutes and "Or-equals"—Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposals forwarded by Owner's, but subject to the provisions of Exhibit A, Paragraph 2.1.A.2.
- 18. Inspections and Tests
 - a. Receive from Owner and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining

whether the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.

- b. Reply to CMAR requests, forwarded by Owner, for written concurrence that specific portions of the Work that are to be inspected, tested, or approved may be covered.
- c. Issue written requests to Owner that specific portions of the Work remain uncovered.
- d. As deemed reasonably necessary, request that Owner direct CMAR to uncover Work that is to be inspected, tested, or approved.
- e. Pursuant to the terms of the CMAR Contract, request additional inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- 19. CMAR's Applications for Payment—Based on Engineer's observations of the Work, as an experienced and qualified design professional, respond to requests from Owner regarding CMAR's compliance with the requirements of the Drawings and Specifications, in the context of CMAR's Applications for Payment.
- 20. Completion of Work under an Early Work Package Amendment or the GMP Amendment—Promptly after notice from Owner that CMAR considers the Work under an Early Work Package Amendment or the GMP Amendment complete, visit the Site in company with Owner and CMAR to review the Work and determine the status of completion. Assist Owner regarding any remaining engineering or technical matters concerning the Early Work Package Amendment or GMP Amendment.
- 21. Substantial Completion—Promptly after notice from Owner that CMAR considers the entire Work ready for its intended use, visit the Site in company with Owner and CMAR to review the Work and determine the status of completion. Assist Owner regarding any remaining engineering or technical matters affecting Owner's use or occupancy of the Work following Substantial Completion. Provide similar services with respect to Substantial Completion of a part of the Work as set forth in the General Conditions, Paragraph 15.04.
- 22. Other Tasks—Perform or provide the following other Construction Phase tasks or deliverables:
 - a. Review Construction Submittals. The Engineer will review construction submittals provided to it by Owner for conformance with the contract requirements. Owner will provide the submittal as a PDF file and Engineer will return the PDF file to Owner with comments noted in the submittal with a recommended action.
 - b. Review Non-Conformance Notices (NCNs). The Engineer will perform technical review and provide responses to NCNs provided to it by Owner.
 - c. Review Requests for Information (RFIs). The Engineer will perform technical review and provide responses to RFIs provided to it by Owner.

- d. Change Order Support. The Engineer will provide technical support as requested by Owner for Change Orders. This support will include providing budget cost estimates for engineered equipment elements. For Owner-initiated change orders, this support will also include preparation of a Design Change Notice (DCN)
- e. Claims Technical Support. The Engineer will provide technical support as requested by Owner related to CMAR claims.
- f. Testing and Acceptance Technical Support. The Engineer will provide technical support as requested by Owner related to equipment and system testing and checkout, commissioning and turnover. The Engineer will perform a substantial completion walk-through and develop a list of corrective items for the punchlist.
- 23. Completion and Acceptability of the Work—After notice from Owner that CMAR has given notice that the Work is complete:
 - a. visit the Site with Owner and CMAR to determine if the Work is in fact complete and acceptable;
 - b. notify Owner of any part of the Work that is found during the visit to be incomplete or defective;
 - upon request, assist Owner with technical or engineering issues in connection with the procedures in the CMAR Contract regarding Owner's review and response to CMAR's application for final payment and accompanying documentation; and
 - d. if Engineer is satisfied that the Work is complete and acceptable, issue a notice addressed to Owner and CMAR stating that the Work is acceptable, subject to the provisions of the Notice and this Agreement, within the limits of Engineer's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement, and deliver such signed notice to Owner, for Owner's signature and distribution and CMAR in connection with the final Application for Payment by CMAR.
- 24. Standards for Certain Construction-Phase Decisions—Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth in the CMAR Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or CMAR, and will not be liable to Owner, CMAR, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.
- C. Duration of Construction Phase—The Construction Phase will commence with the issuance of the first Early Work Package Amendment or the GMP Amendment, as applicable, and will terminate upon written recommendation by Owner for final payment to CMAR. Because the CMAR Contract may include multiple Early Work Package Amendments and the GMP Amendment, the Engineer's Construction Phase services may be rendered non-sequentially, at different times in respect to the separate Early Work Package Amendments. Subject to the provisions of Article 3, Engineer shall be entitled to an equitable increase in compensation if Construction Phase services are required after

the original date for completion and readiness for final payment of CMAR as set forth in the CMAR Contract.

1.7 Post-Construction Phase

- A. Upon written authorization from Owner during the Post-Construction Phase, Engineer shall:
 - Together with Owner visit the Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair any damage to the Site or adjacent areas, and assist Owner in consultations and discussions with CMAR concerning correction of any such defective Work and any needed repairs.
 - Together with Owner, visit the Project within one month before the end of the CMAR
 Contract's correction period to ascertain whether any portion of the Work or the repair
 of any damage to the Site or adjacent areas is defective and therefore subject to
 correction by CMAR.
 - 3. Perform or provide the following other Post-Construction Phase tasks or deliverables:

a. Reserved

B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate 12 months after the commencement of the CMAR Contract's correction period.

ARTICLE 2— ADDITIONAL SERVICES

- 1.8 Additional Services Not Requiring Owner's Written Authorization
 - A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner. These services are not included as part of Basic Services and will be paid for by Owner as Additional Services as indicated in Exhibit J.
 - Substantive design and other technical services in connection with (a) Work Change
 Directives, Change Proposals, and Change Orders to reflect changes requested by
 Owner, and (b) recommendations set forth in additional constructability reviews and
 value engineering studies conducted by CMAR that are not specified in Exhibit A,
 Paragraphs 1.4.G.7 and 1.4.G.8.
 - Services essential to the orderly progress of the Proposal and Construction Phases and not wholly quantifiable prior to those Phases or otherwise dependent on the actions of prospective individual proposers or contractors and including:
 - a. revising Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items;
 - b. services after the award of the CMAR Contract in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project;

- c. evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the CMAR Contract; and
- d. providing to the CMAR or Owner additional or new information not previously prepared or developed by the Engineer for their use in applying for or obtaining required permits and licenses, in responding to agency comments on such applications, or in the administration of any such permits or licenses.
- Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
- 4. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by CMAR.
- 5. Implement coordination of Engineer's services with other parts of the Project that are not planned or designed by Engineer or its Subconsultants, unless Owner furnished to Engineer substantive information about such other parts of the Project prior to the parties' entry into this Agreement, in the Baseline Information section of this Exhibit A, or otherwise in Exhibit A; if such substantive information has been so provided, coordination of Engineer's services will be part of Basic Services.
- 6. Implement the specific parts of an Underground Facilities Procedure that are assigned to Engineer, or above-ground utilities tasks that are assigned to Engineer as the Project progresses, but not including the design-related services already assigned to Engineer as a Basic Service.
- 7. Services, other than Basic Services during the Post-Construction Phase in connection with any partial utilization of the Work by Owner prior to Substantial Completion of the Work as a whole.
- 8. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from CMAR or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.
- 9. Reviewing a Shop Drawing or other CMAR submittal more than three times, as a result of repeated inadequate submissions by CMAR.
- 10. While at the Site, compliance by Engineer and its staff with those terms of Owner's or CMAR's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, State, or local safety authorities for similar construction sites.
- 11. To the extent the Project is subject to Laws and Regulations governing public or government records disclosure or non-disclosure, Engineer will comply with provisions applicable to Engineer, and Owner will compensate Engineer as Additional Services for Engineer's costs to comply with any disclosure or non-disclosure obligations beyond those identified in the Basic Services.

- 12. Services directly attributable to changes in Engineer's Electronic Documents obligations after the effective date of the Agreement.
- 13. Preparing for, coordinating with, participating in, and responding to multiple constructability reviews and value engineering studies conducted by CMAR, in excess of the response to one constructability review and one value engineering study, required as a Basic Service in Exhibit A, Paragraph 1.4.H.7 and 8.
- 14. Preparing for, coordinating with, participating in, and responding to input from Owner or CMAR during the Study and Report Phase or Preliminary Design Phase.

1.9 Additional Services Requiring Owner's Written Authorization

- A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as Additional Services, as indicated in Exhibit J.
 - 1. Obtain or provide specified additional Project-related information and data to enable Engineer to complete its Basic and Additional Services.
 - 2. Preparation of special and customized reporting, invoicing, and related support documentation in addition to that identified to be provided under Basic Services.
 - 3. Preparation of applications and supporting documents, in addition to those furnished under Basic Services, for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
 - Services to make measured drawings of existing conditions or facilities, to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
 - 5. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.
 - 6. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those agreed to in Exhibit A, Paragraph 1.2.A.1.
 - 7. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
 - Providing renderings or models for Owner's use, including development, management, and other services in support of building information modeling or civil integrated management.
 - 9. Undertaking investigations and studies including, but not limited to:

- a. all-hazards risk assessments and other studies to evaluate the feasibility of enhancing the resiliency of the design;
- b. detailed consideration of operations, maintenance, and overhead expenses;
- c. the preparation of feasibility studies, such as those that include projections of output capacity, utility project rates, project market demand, or project revenues, and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities;
- d. preparation of appraisals;
- e. with respect to proprietary systems or processes requiring licensing, providing services necessary to assist Owner in obtaining such licensing;
- f. detailed quantity surveys of materials, equipment, and labor; and
- g. audits or inventories required in connection with construction performed or furnished by Owner.
- 10. Furnishing services of Subconsultants or Engineer's Subcontractors for other than Basic Services.
- 11. Providing data or services of the types described in Article 2, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.
- 12. Providing the following services:
 - a. Services attributable to more Early Work Package Amendments than specified in Exhibit A, Paragraph 1.1.B.
 - b. Services to arrange for performance of construction services for Owner by contractors other than CMAR and administering Owner's contract for such services.
- 13. Services during out-of-town travel required of Engineer, other than for visits to the Site or Owner's office as required in Basic Services (Exhibit A. Article 1).
- 14. Preparing for, coordinating with, participating in, and responding to structured independent review processes, not including reviews conducted by Owner, including, but not limited to, independent cost estimating and project peer review; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such independent review processes.
- 15. Preparing Proposal Documents; preparing pre-qualification procedures and documents; participating in pre-qualifying prospective Proposers; and preparing Contract Documents for alternate bids.
- 16. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.
- 17. Preparing conformed Contract Documents that incorporate and integrate the content of all addenda and any amendments negotiated by Owner and CMAR.

- 18. Services to assist Owner in developing or modifying protocols for transmittal of Electronic Documents by Electronic Means after the effective date of this Agreement, either by revising or adapting Exhibit F to the Project or implementing other Electronic Documents protocols among Project participants.
- 19. Any services by Engineer in connection with Owner or Engineer providing a Document to a Requesting Party under Exhibit F, Paragraph 1.1.D (see Exhibit F, Electronic Documents Protocol), or any other distribution of a Document to a third party. Such services may include but are not limited to preparing the data contained in the requested Document in a manner deemed appropriate by Engineer; creating or otherwise preparing and distributing the Document in a format necessary to respond to Owner's direction or decision to provide the Document to a requesting party, including CMAR, in a format other than that required for deliverables from Engineer to Owner; and services in connection with obtaining required releases from the third parties to which the Documents will be distributed. Compensation for these Additional Services is not contingent upon Owner's reimbursement from the requesting party.
- 20. Providing Construction Phase services beyond the original date for completion and readiness for final payment of CMAR, but only if such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.
- 21. Preparing Record Drawings and furnishing such Record Drawings to Owner.
- 22. Supplementing Record Drawings with information regarding the completed Project, Site, and adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.
- 23. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from CMAR, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.
- 24. Preparation of operation, maintenance, and staffing manuals.
- 25. Protracted or extensive assistance in refining and adjusting of Project equipment and systems (such as initial startup, testing, and balancing).
- 26. Assistance to Owner in training Owner's staff to operate and maintain Project equipment and systems.
- 27. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Project equipment and systems, and (b) related recordkeeping.
- 28. Preparing to serve or serving as a consultant or witness for, or producing documents for or on behalf of, Owner in any litigation, arbitration, mediation, lien or bond claim, or other legal or administrative proceeding involving the Project, but not including disputes between Owner and Engineer.
- 29. Overtime work requiring higher than regular rates.
- 30. Providing construction surveys and staking to enable CMAR to perform its work; any type of property surveys or related engineering services needed for the transfer of interests in real property; providing construction and property surveys to replace

- reference points or property monuments lost or destroyed during construction; and providing other special field surveys.
- 31. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
- 32. Extensive services required during any correction period, or with respect to monitoring CMAR's compliance with warranties and guarantees called for in the CMAR Contract, except as agreed to under Basic Services.
- 33. Additional site visits, including but not limited to additional periodic visits, or attendance at construction progress meetings or workshops, in excess of those visits, meetings, or workshops required under Basic Services; and additional visits made at Owner's, request, or as engineer of record.
- 34. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

EXHIBIT A—ENGINEER'S SERVICES
Appendix 1— AlexRenew WRRF Preliminary/Primary System Upgrades Final Preliminary Engineering Report (PER)
SEE RFP FOR DOCUMENT

XHIBIT B—Deliverables	
Reserved	

EXHIBIT C-RESERVED

Exhibit C Reserved

EXHIBIT D—RESERVED		

EXI	HIR	IT	F—	RF.	SF	RV	'FD

FX	HIF	RIT	F—I	RES	FR\	/FD

ARTICLE 1—INSURANCE

Paragraph 6.4 of the Agreement, Insurance, is supplemented to include the following Exhibit G, Paragraphs 1.1 and 1.2:

1.1 Insurance Policies and Limits

A. In accordance with Paragraph 6.4.A of the Agreement, the insurance that Engineer must procure and maintain, and the policy limits of such insurance, are as follows:

Coverage	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Employer's Liability	
Bodily Injury, Each Accident	\$1,000,000
Commercial General Liability	
General Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Bodily Injury and Property Damage—Each Occurrence	\$1,000,000
Automobile Liability	
Each Accident	\$1,000,000
Excess or Umbrella Liability	
Each Occurrence	\$5,000,000
General Aggregate	\$5,000,000
Professional Liability	
Each Claim Made	\$5,000,000
Annual Aggregate	\$5,000,000

1.2 Additional Insureds

A. Engineer shall require the insurances noted above in Section 1.1.A. of any subconsultants or subcontractors provided, however, that the required limits of insurance for Professional Liability shall be \$1,000,000 per claim and aggregate annually and there shall be no requirement for umbrella/excess liability insurance. Owner shall be listed as an additional insured on the Commercial General Liability and Automobile Liability policies on a primary and non-contributory basis and there shall be a waiver of subrogation on all required policies in favor of Owner.



EXHIBIT J—PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES COMPENSATION PACKET BC3 BASIC SERVICES DIRECT LABOR COSTS TIMES A FACTOR

Article 2 of the Agreement is supplemented to include the following Exhibit J, Paragraphs 1.1, 1.2, and 1.3:

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A as follows:
 - 1. An amount equal to Engineer's Direct Labor Costs times an indirect cost rate calculated and approved in compliance with the Federal Acquisition Regulation (FAR Rate) plus an overhead rate not to exceed 10% for the services of Engineer's personnel engaged on the Project, plus Reimbursable Expenses, estimated to be \$[Enter Amount] for the first year of the project plus Engineer's Subcontractors' and Subconsultants' charges, if any, estimated to be \$[Enter Amount].
 - 2. Engineer's Reimbursable Expenses Schedule is attached to this Exhibit J as Appendix 1.
 - 3. The total compensation for such services is estimated to be **\$[Enter Amount]** for the first year of the project based on the following distribution of compensation:

a.	Direct Labor Costs	\$
b.	FAR Rate Indirect Costs	\$
c.	Overhead (10%)	\$
d.	Reimbursable Expenses	\$
e.	Subcontractors and Subconsultants	\$
f.	Year 1 Total	\$

- 4. Engineer may alter the distribution of compensation between the above categories noted herein to be consistent with services actually rendered, but compensation will not exceed the total estimated compensation amount unless approved in writing by Owner. See Exhibit J, Paragraph 1.3.C.2 below.
- 5. The total estimated compensation for Engineer's services included in the breakdown by phases incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer's Subcontractors' and Subconsultants' charges.
- 6. The portion of the amounts billed for Engineer's services which are related to services rendered on a Direct Labor Costs times a Factor basis will be billed based on the applicable Direct Labor Costs for the cumulative hours charged to the Project by Engineer's principals and employees multiplied by the above-designated factor, plus Reimbursable Expenses and Engineer's Subcontractors' and Subconsultants' charges incurred during the billing period.
- 7. Direct Labor Costs means salaries and wages paid to Engineer's employees but does not include payroll-related costs or benefits.
- 1.3 Compensation for Reimbursable Expenses
 - A. Owner shall reimburse Engineer for all Reimbursable Expenses directly related to the provision of Basic Services, using the rates set forth in Appendix 1 to this Exhibit J when applicable.

- B. Reimbursable Expenses include the expenses identified in Appendix 1 and the following: transportation (including mileage), lodging, and subsistence incidental thereto; providing and maintaining field office facilities including furnishings and utilities; toll telephone calls, mobile phone charges, and courier charges; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar Project-related items. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project with the actual costs passed through to Owner with no mark-up.

1.4 Other Provisions Concerning Payment

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Subcontractors and Subconsultants, such compensation will be the amounts billed by Engineer's Subcontractors and Subconsultants to Engineer times a factor of **10**%.
- B. Factors—The external Reimbursable Expenses and Engineer's Subcontractors' and Subconsultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts
 - 1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
 - 2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that the total compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof, allowing Owner to consider its options, including suspension or termination of Engineer's services for Owner's convenience. Upon notice, Owner and Engineer will promptly review the matter of services remaining to be performed and compensation for such services. Owner shall either exercise its right to suspend or terminate Engineer's services for Owner's convenience, agree to such compensation exceeding said estimated amount, or agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Owner decides not to suspend Engineer's services during the negotiations and Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, then Engineer shall be paid for all services rendered hereunder.
- D. Direct Labor Costs, the factor applied to Direct Labor Costs, and the Reimbursable Expenses Schedule will be adjusted annually no later than November 1 of any calendar year to reflect equitable changes to the compensation payable to Engineer.
- E. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

ARTICLE 1—COMPENSATION PACKET AS-2—ADDITIONAL SERVICES—DIRECT LABOR COSTS TIMES A FACTOR

Article 2 of the Agreement is supplemented to include the following Exhibit J, Paragraph 3.01:

- 1.1 Compensation for Additional Services—Salary Costs Times a Factor Method of Payment
 - A. Owner shall pay Engineer for Additional Services as follows:
 - 1. For services of Engineer's personnel engaged directly in providing Additional Services, except for services as a consultant or witness which if needed will be separately negotiated based on the nature of the required consultation or testimony, an amount equal to the cumulative hours charged by such personnel for Additional Services times the Engineer's applicable Salary Costs times an indirect cost rate calculated and approved in compliance with the Federal Acquisition Regulation (FAR Rate) plus an overhead rate not to exceed 10% plus Additional Services-related Reimbursable Expenses and Additional Services-related Engineer's Subcontractors' and Subconsultants' charges, if any.
 - B. Compensation for Reimbursable Expenses
 - 1. For those Reimbursable Expenses that are directly related to the provision of Additional Services and are not already accounted for in the compensation for Basic Services or RPR-related services, Owner shall reimburse Engineer, using the rates set forth in Appendix 1 to this Exhibit J when applicable.
 - 2. Such Reimbursable Expenses, to the extent Additional Services-related, include the expenses identified in Appendix 1 and the following: transportation (including mileage), lodging, and subsistence incidental thereto; toll telephone calls, mobile phone charges, and courier charges; reproduction of reports, Drawings, Specifications, bidding-related or other procurement documents, Construction Contract Documents, and similar items. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for the use of highly specialized equipment.
 - 3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to Additional Services.
 - C. Other Provisions Concerning Payment for Additional Services
 - Whenever Engineer is entitled to compensation for the Additional Services-related charges of Engineer's Subcontractors and Subconsultants, such compensation will be the amounts billed by Engineer's Subcontractors and Subconsultants to Engineer times a factor of 10%.
 - 2. Factors—The external Reimbursable Expenses and Engineer's Subcontractors' and Subconsultants' factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

3.	Salary Costs, the factor applied to Salary Costs, and the Reimbursable Expenses Schedule will be adjusted annually as of November 1 to reflect equitable changes in the compensation payable to Engineer for Additional Services-related services and expenses.
4.	To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

EXHIBIT J—PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES APPENDIX 1—REIMBURSABLE EXPENSES SCHEDULE

Reimbursable Expenses are subject to review and adjustment per Exhibit J. Rates and charges for Reimbursable Expenses as of the date of the Agreement are:

8"x11" Copies/Impressions	\$ [Enter Cost]/page
Copies of Drawings	\$ [Enter Cost]/sq. ft.
Mileage (auto)	\$ [Enter Cost]/mile
Air Transportation	at cost
Laboratory Testing	at cost
Health and Safety	\$ [Enter Cost]/day
Meals and Lodging	at cost

EXHIBIT J—PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES APPENDIX 2—STANDARD HOURLY RATES SCHEDULE

A. Standard Hourly Rates

- 1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit J and include salaries and wages paid to key personnel plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
- 2. Designated Key personnel are:

Name 1	Project Manager	
Name 2	Lead Wastewater Engineer	
Name 3	Lead Structural Engineer	
Name 5	Permitting Lead	
Name 6	Maintenance of Plant Operations	
	Specialist	

- 3. The Standard Hourly Rates apply only as specified in Exhibit J.
- B. Schedule: Hourly rates for services performed on or after the date of the Agreement are:

Droinet Manager	Direct Labor Costs
Project Manager	Direct Labor Costs
Lead Wastewater Engineer	Direct Labor Costs
Lead Structural Engineer	Direct Labor Costs
Permitting Lead	Direct Labor Costs
Maintenance of Plant Operations Specialist	Direct Labor Costs
Title 7	Direct Labor Costs
Title 8	Direct Labor Costs
Title 9	Direct Labor Costs

EXHIBIT J—PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES
APPENDIX 3—STANDARD BUDGET TEMPLATE

TO BE PROVIDED WHEN AVAILABLE