

**City and County of San Francisco
San Francisco Public Utilities Commission
525 Golden Gate Avenue
San Francisco, CA 94102**

**Agreement between the City and County of San Francisco and
CDM Smith, Inc.**

PUC.PRO.0120 Engineering Services for Sunol Valley Water Treatment Plant Ozonation

This Agreement is made this 5th day of February, 2020, in the City and County of San Francisco (“City”), State of California, by and between CDM Smith, Inc. located at 220 Montgomery Street, Suite 1418, San Francisco, CA 94104 (“Contractor”) and City.

Recitals

WHEREAS, the San Francisco Public Utilities Commission (“Department” or “SFPUC”) wishes to retain the services of Contractor to provide planning and engineering services for the Sunol Valley Water Treatment Plant (“SVWTP”) Improvements Project; and,

WHEREAS, this Agreement was competitively procured as required by San Francisco Administrative Code Chapter 6.40 through a Request for Proposal (“RFP”) issued on June 7, 2019, in which City selected Contractor as the highest qualified scorer pursuant to the RFP; and

WHEREAS, the Local Business Entity (“LBE”) subcontracting participation requirement for this Agreement is 8%; and

WHEREAS, Contractor represents and warrants that it is qualified to perform the Services required by City as set forth under this Agreement; and

WHEREAS, the City’s Civil Service Commission approved Contract number 47941 – 18/19 on May 20, 2019;

WHEREAS, the SFPUC awarded this Agreement to Contractor under Resolution No. 19-0210 on November 12, 2019;

WHEREAS, the San Francisco Board of Supervisors approved this Agreement by Resolution No. 13-20 on January 24, 2020;

Now, THEREFORE, the parties agree as follows:

Article 1 Definitions

The following definitions apply to this Agreement:

1.1 “Agreement” means this contract document, including all attached appendices, and all applicable City Ordinances and Mandatory City Requirements specifically incorporated into this Agreement by reference as provided herein.

1.2 "City" or "the City" means the City and County of San Francisco, a municipal corporation, acting by and through the San Francisco Public Utilities Commission.

1.3 "CMD" means the Contract Monitoring Division of the City.

1.4 "Confidential Information" means confidential City information including, but not limited to, personally-identifiable information ("PII"), protected health information ("PHI"), or individual financial information (collectively, "Proprietary or Confidential Information") that is subject to local, state or federal laws restricting the use and disclosure of such information, including, but not limited to, Article 1, Section 1 of the California Constitution; the California Information Practices Act (Civil Code § 1798 et seq.); the California Confidentiality of Medical Information Act (Civil Code § 56 et seq.); the federal Gramm-Leach-Bliley Act (15 U.S.C. §§ 6801(b) and 6805(b)(2)); the privacy and information security aspects of the Administrative Simplification provisions of the federal Health Insurance Portability and Accountability Act (45 CFR Part 160 and Subparts A, C, and E of part 164); and San Francisco Administrative Code Chapter 12M (Chapter 12M).

1.5 "Contractor" or "Consultant" means CDM Smith, Inc. located at 220 Montgomery Street, Suite 1418, San Francisco, CA 94104 .

1.6 "Deliverables" means Contractor's work product resulting from the Services provided by Contractor to City during the course of Contractor's performance of the Agreement, including without limitation, the work product described in the "Scope of Services" attached as Appendix A.

1.7 "Effective Date" means the Effective Date stated in the Notice of Contract Award issued by the SFPUC once the Agreement has been fully approved and executed.

1.8 "Mandatory City Requirements" means those City laws set forth in the San Francisco Municipal Code, including the duly authorized rules, regulations, and guidelines implementing such laws that impose specific duties and obligations upon Contractor.

1.9 "Party" and "Parties" mean the City and Contractor either collectively or individually.

1.10 "Services" means the work performed by Contractor under this Agreement as specifically described in the "Scope of Services" attached as Appendix A, including all services, labor, supervision, materials, equipment, actions and other requirements to be performed and furnished by Contractor under this Agreement.

Article 2 Term of the Agreement

2.1 The term of this Agreement shall commence on the later of (i) February 10, 2020; or (ii) the Effective Date and expire on February 10, 2026, unless earlier terminated as otherwise provided herein.

2.2 The City has an option to renew the Agreement for three (3) additional years, for a total term of up to nine (9) years. The City may extend this Agreement beyond the expiration date by exercising an option at the City's sole and absolute discretion and by modifying this Agreement as provided in Section 11.5, "Modification of this Agreement."

Article 3 Financial Matters

3.1 Certification of Funds; Budget and Fiscal Provisions; Termination in the Event of Non-Appropriation. This Agreement is subject to the budget and fiscal provisions of the City's Charter. Charges will accrue only after prior written authorization certified by the Controller, and the amount of City's obligation hereunder shall not at any time exceed the amount certified for the purpose and period stated in such advance authorization. This Agreement will terminate without penalty, liability or expense of any kind to City at the end of any fiscal year if funds are not appropriated for the next succeeding fiscal year. If funds are appropriated for a portion of the fiscal year, this Agreement will terminate, without penalty, liability or expense of any kind at the end of the term for which funds are appropriated. City has no obligation to make appropriations for this Agreement in lieu of appropriations for new or other agreements. City budget decisions are subject to the discretion of the Mayor and the Board of Supervisors. Contractor's assumption of risk of possible non-appropriation is part of the consideration for this Agreement.

THIS SECTION CONTROLS AGAINST ANY AND ALL OTHER PROVISIONS OF THIS AGREEMENT.

3.2 Guaranteed Maximum Costs. The City's payment obligation to Contractor cannot at any time exceed the amount certified by City's Controller for the purpose and period stated in such certification. Absent an authorized Emergency per the City Charter or applicable Code, no City representative is authorized to offer or promise, nor is the City required to honor, any offered or promised payments to Contractor under this Agreement in excess of the certified maximum amount without the Controller having first certified the additional promised amount and the Parties having modified this Agreement as provided in Section 11.5, "Modification of this Agreement."

3.3 Compensation.

3.3.1 Payment. Contractor shall provide an invoice to the City on a monthly basis for Services completed in the immediate preceding month, unless a different schedule is set out in Appendix B, "Calculation of Charges." Compensation shall be made for Services identified in the invoice that the General Manager of the SFPUC, in his or her sole discretion, concludes has been satisfactorily performed. Payment shall be made within 30 calendar days of receipt of the invoice, unless the City notifies the Contractor that a dispute as to the invoice exists. In no event shall the amount of this Agreement exceed fifteen million dollars and no pennies (\$15,000,000.00). The breakdown of charges associated with this Agreement appears in Appendix B, "Calculation of Charges," attached hereto and incorporated by reference as though fully set forth herein. A portion of payment may be withheld until conclusion of the Agreement if agreed to by both parties as retainage, described in Appendix B. In no event shall City be liable for interest or late charges for any late payments.

3.3.2 Payment Limited to Satisfactory Services. Contractor is not entitled to any payments from City until SFPUC approves Services, including any furnished Deliverables, as satisfying all of the requirements of this Agreement. Payments to Contractor by City shall not excuse Contractor from its obligation to replace unsatisfactory Deliverables, including equipment, components, materials, or Services even if the unsatisfactory character of such Deliverables, equipment, components, materials, or Services may not have been apparent or detected at the time such payment was made.

Deliverables, equipment, components, materials and Services that do not conform to the requirements of this Agreement may be rejected by City and in such case must be replaced by Contractor without delay at no cost to the City.

3.3.3 Withhold Payments. If Contractor fails to provide Services in accordance with Contractor's obligations under this Agreement, the City may withhold any and all payments due Contractor until such failure to perform is cured, and Contractor shall not stop work as a result of City's withholding of payments as provided herein.

3.3.4 Invoice Format. Invoices furnished by Contractor under this Agreement must be in a form acceptable to the Controller and City, and must include a unique invoice number. Payment shall be made by City as specified in 3.3.6 or in such alternate manner as the Parties have mutually agreed upon in writing.

3.3.5 LBE Payment and Utilization Tracking. Contractor must submit all required payment information using the City's Financial System as required by CMD to enable the City to monitor Contractor's compliance with the LBE subcontracting commitments in this Agreement. Contractor shall pay its LBE subcontractors within three working days after receiving payment from the City, except as otherwise authorized by the LBE Ordinance. The Controller is not authorized to pay invoices submitted by Contractor prior to Contractor's submission of all required CMD payment information. Failure to submit all required payment information to the City's Financial System with each payment request may result in the Controller withholding 20% of the payment due pursuant to that invoice until the required payment information is provided. Following City's payment of an invoice, Contractor has ten calendar days to acknowledge using the City's Financial System that all subcontractors have been paid. Self-Service Training for suppliers is located at this link: <https://sfcitypartner.sfgov.org/Training/TrainingGuide>.

3.3.6 Getting paid by the City for goods and/or services.

(a) All City vendors receiving new contracts, contract renewals, or contract extensions must sign up to receive electronic payments through the City's Automated Clearing House (ACH) payments service/provider. Electronic payments are processed every business day and are safe and secure. To sign up for electronic payments, visit www.sfgov.org/ach.

(b) The following information is required to sign up: (i) The enroller must be their company's authorized financial representative, (ii) the company's legal name, main telephone number and all physical and remittance addresses used by the company, (iii) the company's U.S. federal employer identification number (EIN) or Social Security number (if they are a sole proprietor), and (iv) the company's bank account information, including routing and account numbers.

3.3.7 Subcontractor Prompt Payment. Except as otherwise required by Chapter 14B of the Administrative Code, and consistent with the provisions of Section 6.42(f) of the Administrative Code, Contractor shall pay its subcontractors within seven calendar days after receipt of each progress payment from the City, unless otherwise agreed to in writing by both Contractor and the subcontractor. In the event that there is a good faith dispute over all or any portion of the amount due on a progress payment from Contractor to a subcontractor, the Contractor may withhold the disputed amount, but shall pay the

undisputed amount. If Contractor violates the provisions of Section 6.42(f), then Contractor shall pay to the subcontractor directly the penalty specified in Section 6.42(f).

3.4 Audit and Inspection of Records. Contractor agrees to maintain and make available to the City, during regular business hours, accurate books and accounting records relating to its Services. Contractor will permit City to audit, examine and make excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. Contractor shall maintain such data and records in an accessible location and condition for a period of not fewer than five years after final payment under this Agreement or until after final audit has been resolved, whichever is later. The State of California or any Federal agency having an interest in the subject matter of this Agreement shall have the same rights as conferred upon City by this Section. Contractor shall include the same audit and inspection rights and record retention requirements in all subcontracts.

3.5 Submitting False Claims. Pursuant to Article V of Chapter 6 of the Administrative Code, any contractor, subcontractor, supplier, consultant or subconsultant who submits a false claim may be subject to monetary penalties, investigation and prosecution and may be declared an irresponsible bidder or an unqualified consultant and debarred as set forth in that Article. A contractor, subcontractor, supplier, consultant or sub consultant will be deemed to have submitted a false claim to the City if the contractor, subcontractor, supplier, consultant or subconsultant: (a) knowingly presents or causes to be presented to an officer or employee of the City a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the City; (c) conspires to defraud the City by getting a false claim allowed or paid by the City; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to the City; or (e) is a beneficiary of an inadvertent submission of a false claim to the City, subsequently discovers the falsity of the claim, and fails to disclose the false claim to the City within a reasonable time after discovery of the false claim.

3.6 Payment of Prevailing Wages

3.6.1 Covered Services. Services to be performed by Contractor under this Agreement may involve the performance of trade work covered by the provisions of Section 6.22(e) [Prevailing Wages] of the Administrative Code (collectively, "Covered Services"). The provisions of Section 6.22(e) of the Administrative Code are incorporated as provisions of this Agreement as if fully set forth herein and will apply to any Covered Services performed by Contractor and its subcontractors.

3.6.2 Wage Rates. The latest prevailing wage rates for private employment on public contracts as determined by the San Francisco Board of Supervisors and the Director of the California Department of Industrial Relations, as such prevailing wage rates may be changed during the term of this Agreement, are hereby incorporated as provisions of this Agreement. Copies of the prevailing wage rates as fixed and determined by the Board of Supervisors are available from the Office of Labor Standards and Enforcement ("OLSE") and are also available on the Internet at <http://www.dir.ca.gov/DLSR/PWD>. Contractor agrees that it shall pay not less than the prevailing wage rates, as fixed and determined by

the Board, to all workers employed by Contractor who perform Covered Services under this Agreement. Contractor further agrees as follows:

3.6.3 Subcontract Requirements. As required by Section 6.22(e)(5) of the Administrative Code, Contractor shall insert in every subcontract or other arrangement, which it may make for the performance of Covered Services under this Agreement, a provision that said subcontractor shall pay to all persons performing labor in connection with Covered Services under said subcontract or other arrangement not less than the highest general prevailing rate of wages as fixed and determined by the Board of Supervisors for such labor or services.

3.6.4 Posted Notices. As required by Section 1771.4 of the California Labor Code, Contractor shall post job site notices prescribed by the California Department of Industrial Relations ("DIR") at all job sites where Covered Services are to be performed.

3.6.5 Payroll Records. As required by Section 6.22(e)(6) of the Administrative Code and Section 1776 of the California Labor Code, Contractor shall keep or cause to be kept complete and accurate payroll records for all trade workers performing Covered Services. Such records shall include the name, address and social security number of each worker who provided Covered Services on the project, including apprentices, his or her classification, a general description of the services each worker performed each day, the rate of pay (including rates of contributions for, or costs assumed to provide fringe benefits), daily and weekly number of hours worked, deductions made and actual wages paid. Every subcontractor who shall undertake the performance of any part of Covered Services shall keep a like record of each person engaged in the execution of Covered Services under the subcontract. All such records shall at all times be available for inspection of and examination by the City and its authorized representatives and the DIR.

3.6.6 Certified Payrolls. Certified payrolls shall be prepared pursuant to Administrative Code Section 6.22(e)(6) and California Labor Code Section 1776 for the period involved for all employees, including those of subcontractors, who performed labor in connection with Covered Services. Contractor and each subcontractor performing Covered Services shall submit certified payrolls to the City and to the DIR electronically. Contractor shall submit payrolls to the City via the reporting system selected by the City. The DIR will specify how to submit certified payrolls to it. The City will provide basic training in the use of the reporting system at a scheduled training session. Contractor and all subcontractors that will perform Covered Services must attend the training session. Contractor and applicable subcontractors shall comply with electronic certified payroll requirements (including training) at no additional cost to the City.

3.6.7 Compliance Monitoring. Covered Services to be performed under this Agreement are subject to compliance monitoring and enforcement of prevailing wage requirements by the DIR and /or the OLSE. Contractor and any subcontractors performing Covered Services will cooperate fully with the DIR and/or the OLSE and other City employees and agents authorized to assist in the administration and enforcement of the prevailing wage requirements, and agrees to take the specific steps and actions as required by Section 6.22(e)(7) of the Administrative Code. Steps and actions include but are not limited to requirements that: (A) the Contractor will cooperate fully with the Labor Standards Enforcement Officer and other City employees and agents authorized to assist in

the administration and enforcement of the Prevailing Wage requirements and other labor standards imposed on Public Works Contractor by the Charter and Chapter 6 of the San Francisco Administrative Code; (B) the Contractor agrees that the Labor Standards Enforcement Officer and his or her designees, in the performance of their duties, shall have the right to engage in random inspections of job sites and to have access to the employees of the Contractor, employee time sheets, inspection logs, payroll records and employee paychecks; (C) the contractor shall maintain a sign-in and sign-out sheet showing which employees are present on the job site; (D) the Contractor shall prominently post at each job-site a sign informing employees that the project is subject to the City's Prevailing Wage requirements and that these requirements are enforced by the Labor Standards Enforcement Officer; and (E) that the Labor Standards Enforcement Officer may audit such records of the Contractor as he or she reasonably deems necessary to determine compliance with the Prevailing Wage and other labor standards imposed by the Charter and this Chapter on Public Works Contractors. Failure to comply with these requirements may result in penalties and forfeitures consistent with analogous provisions of the California Labor Code, including Section 1776(g), as amended from time to time.

3.6.8 Remedies. Should Contractor, or any subcontractor who shall undertake the performance of any Covered Services, fail or neglect to pay to the persons who perform Covered Services under this Contract, subcontract or other arrangement for the Covered Services, the general prevailing rate of wages as herein specified, Contractor shall forfeit, and in the case of any subcontractor so failing or neglecting to pay said wage, Contractor and the subcontractor shall jointly and severally forfeit, back wages due plus the penalties set forth in Administrative Code Section 6.22 (e) and/or California Labor Code Section 1775. The City, when certifying any payment which may become due under the terms of this Agreement, shall deduct from the amount that would otherwise be due on such payment the amount of said forfeiture.

3.7 Apprentices

3.7.1 Contractor and its subcontractors of every tier that provide Covered Services under this Agreement (as defined in Section 10.20 above) shall, as a material term of the Agreement, comply with the requirements of the State Apprenticeship Program (as set forth in the California Labor Code, Division 3, Chapter 4 [commencing at Section 3070], and Section 1777.5 of the Labor Code) and Administrative Code Section 6.22(n). Contractor shall be solely responsible for securing compliance with Labor Code Section 1777.5 for all apprenticeable occupations.

3.7.2 Contractor shall include in all of its subcontracts the obligation for subcontractors to comply with the requirements of the State Apprenticeship Program.

3.7.3 Should Contractor fail to comply with the apprenticeship requirements of Labor Code section 1777.5, Contractor shall be subject to the penalties prescribed in Labor Code Section 1777.7. The interpretation and enforcement of Labor Code Section 1777.5 shall be in accordance with rules and procedures prescribed by the California Apprenticeship Council.

3.7.4 Contractor, if not signatory to a recognized apprenticeship training program under Labor Code, Chapter 4, shall provide to the City with all progress payment requests, starting with the second such request, satisfactory evidence that it has contributed

to the appropriate apprenticeship fund(s). Contractor shall require its subcontractors who are not signatories to provide such evidence to the City as a condition precedent for qualifying for payment from the City.

3.7.5 Contractor shall comply with all requests by the City to provide proof that Contractor and all of its subcontractors at every tier providing Covered Services are in compliance with the State Apprenticeship Program, including proof that Contractor and all of its subcontractors at any tier providing Covered Services contributed to the appropriate apprenticeship fund(s).

Article 4 Services and Resources

4.1 **Services Contractor Agrees to Perform.** Contractor agrees to perform the Services stated in Appendix A, "Scope of Services." Officers and employees of the City are not authorized to request, and the City is not required to reimburse the Contractor for, Services beyond the Scope of Services listed in Appendix A, unless Appendix A is modified as provided in Section 11.5, "Modification of this Agreement."

4.2 **Qualified Personnel.** Contractor shall utilize only competent personnel under the supervision of, and in the employment of, Contractor (or Contractor's authorized subcontractors) to perform the Services. Contractor will comply with City's reasonable requests regarding assignment and/or removal of personnel, but all personnel, including those assigned at City's request, must be supervised by Contractor. Contractor shall commit adequate resources to allow timely completion within the project schedule specified in this Agreement.

4.3 Subcontracting.

4.3.1 Contractor may subcontract portions of the Services only upon prior written approval of City. Contractor is responsible for its subcontractors throughout the course of the work required to perform the Services. All Subcontracts must incorporate the terms of Article 10 "Additional Requirements Incorporated by Reference" of this Agreement, unless inapplicable. Neither Party shall, on the basis of this Agreement, contract on behalf of, or in the name of, the other Party. Any agreement made in violation of this provision shall be null and void.

4.3.2 City's execution of this Agreement constitutes its approval of the subcontractors listed in Appendix B, Calculation of Charges. Consistent with SFPUC policy, any modifications to the list of subcontractors must be effectuated via City's approved invoice processing system, subject to the written approval of the City, and CMD, as needed.

4.4 Independent Contractor; Payment of Employment Taxes and Other Expenses.

4.4.1 **Independent Contractor.** For the purposes of this Section 4.4, "Contractor" shall be deemed to include not only Contractor, but also any agent or employee of Contractor. Contractor acknowledges and agrees that at all times, Contractor or any agent or employee of Contractor shall be deemed at all times to be an independent contractor and is wholly responsible for the manner in which it performs the services and work requested by City under this Agreement. Contractor, its agents, and employees will not represent or hold themselves out to be employees of the City at any time. Contractor or any agent or employee of Contractor shall not have employee status with City, nor be entitled to

participate in any plans, arrangements, or distributions by City pertaining to or in connection with any retirement, health or other benefits that City may offer its employees. Contractor or any agent or employee of Contractor is liable for the acts and omissions of itself, its employees and its agents. Contractor shall be responsible for all obligations and payments, whether imposed by federal, state or local law, including, but not limited to, FICA, income tax withholdings, unemployment compensation, insurance, and other similar responsibilities related to Contractor's performing services and work, or any agent or employee of Contractor providing same. Nothing in this Agreement shall be construed as creating an employment or agency relationship between City and Contractor or any agent or employee of Contractor. Any terms in this Agreement referring to direction from City shall be construed as providing for direction as to policy and the result of Contractor's work only, and not as to the means by which such a result is obtained. City does not retain the right to control the means or the method by which Contractor performs work under this Agreement. Contractor agrees to maintain and make available to City, upon request and during regular business hours, accurate books and accounting records demonstrating Contractor's compliance with this section. Should City determine that Contractor, or any agent or employee of Contractor, is not performing in accordance with the requirements of this Agreement, City shall provide Contractor with written notice of such failure. Within five (5) business days of Contractor's receipt of such notice, and in accordance with Contractor policy and procedure, Contractor shall remedy the deficiency. Notwithstanding, if City believes that an action of Contractor, or any agent or employee of Contractor, warrants immediate remedial action by Contractor, City shall contact Contractor and provide Contractor in writing with the reason for requesting such immediate action.

4.4.2 Payment of Employment Taxes and Other Expenses. Should City, in its discretion, or a relevant taxing authority such as the Internal Revenue Service or the State Employment Development Division, or both, determine that Contractor is an employee for purposes of collection of any employment taxes, the amounts payable under this Agreement shall be reduced by amounts equal to both the employee and employer portions of the tax due (and offsetting any credits for amounts already paid by Contractor which can be applied against this liability). City shall then forward those amounts to the relevant taxing authority. Should a relevant taxing authority determine a liability for past services performed by Contractor for City, upon notification of such fact by City, Contractor shall promptly remit such amount due or arrange with City to have the amount due withheld from future payments to Contractor under this Agreement (again, offsetting any amounts already paid by Contractor which can be applied as a credit against such liability). A determination of employment status pursuant to this Section 4.4 shall be solely limited to the purposes of the particular tax in question, and for all other purposes of this Agreement, Contractor shall not be considered an employee of City. Notwithstanding the foregoing, Contractor agrees to indemnify and save harmless City and its officers, agents and employees from, and, if requested, shall defend them against any and all claims, losses, costs, damages, and expenses, including attorneys' fees, arising from this section.

4.5 Assignment. The Services to be performed by Contractor are personal in character. Neither this Agreement, nor any duties or obligations hereunder, may be directly or indirectly assigned, novated, hypothecated, transferred, or delegated by Contractor, or, where the Contractor is a joint venture, a joint venture partner, (collectively referred to as an "Assignment") unless first approved by City by written instrument executed and approved in the

same manner as this Agreement in accordance with the Administrative Code. The City's approval of any such Assignment is subject to the Contractor demonstrating to City's reasonable satisfaction that the proposed transferee is: (i) reputable and capable, financially and otherwise, of performing each of Contractor's obligations under this Agreement and any other documents to be assigned, (ii) not forbidden by applicable law from transacting business or entering into contracts with City; and (iii) subject to the jurisdiction of the courts of the State of California. A change of ownership or control of Contractor or a sale or transfer of substantially all of the assets of Contractor shall be deemed an Assignment for purposes of this Agreement. Contractor shall immediately notify City about any Assignment. Any purported Assignment made in violation of this provision shall be null and void.

4.6 **Warranty.** Contractor warrants to City that the Services will be performed with the degree of skill and care that is required by current, good and sound professional procedures and practices, and in conformance with generally accepted professional standards prevailing at the time the Services are performed so as to ensure that all Services performed are correct and appropriate for the purposes contemplated in this Agreement.

Article 5 Insurance and Indemnity Insurance and Indemnity

5.1 Insurance.

5.1.1 **Required Coverages.** Without in any way limiting Contractor's liability pursuant to the "Indemnification" section of this Agreement, Contractor must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages:

(a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, injury, or illness; and

(b) Commercial General Liability Insurance with limits not less than \$5,000,000 each occurrence for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and

(c) Commercial Automobile Liability Insurance with limits not less than \$2,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

(d) Professional Liability Insurance, applicable to Contractor's profession, with limits not less than \$15,000,000 for each claim with respect to negligent acts, errors or omissions in connection with the Services.

5.1.2 Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

5.1.3 Contractor's Commercial General Liability and Commercial Automobile Liability Insurance policies shall provide that such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that the insurance applies separately to each insured against whom claim is made or suit is brought.

5.1.4 Contractor shall provide thirty (30) days' advance written notice to the City of cancellation, intended non-renewal, or reduction in coverages, except for non-payment for which no less than ten (10) days' notice shall be provided to City. Notices shall be sent to the City address set forth in Section 11.1 entitled "Notices to the Parties" and emailed to cityreq@sfwater.org.

5.1.5 Should any of the required insurance be provided under a claims-made form, Contractor shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the contract term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

5.1.6 Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in such general annual aggregate limit, such general annual aggregate limit shall be double the occurrence or claims limits specified above.

5.1.7 Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the City receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, the City may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

5.1.8 Before commencing any Services, Contractor shall furnish to City certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to City, in form evidencing all coverages set forth above. Approval of the insurance by City shall not relieve or decrease Contractor's liability hereunder.

5.1.9 The Workers' Compensation policy(ies) shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

5.1.10 If Contractor will use any subcontractor(s) to provide Services, Contractor shall require the subcontractor(s) to provide all necessary insurance and to name the City and County of San Francisco, its officers, agents and employees and the Contractor as additional insureds.

5.3 Indemnification and Defense Obligations For Design Professionals.

5.3.1 **Defense Obligations.** To the fullest extent permitted by law, Contractor shall, following a tender of defense from City, assume the immediate defense of (with legal counsel subject to approval of the City), the City, its boards, commissions, officers, and employees (collectively "Indemnitees"), from and against any and all claims, losses, costs, damages, expenses and liabilities of every kind, nature, and description including, without limitation, injury to or death of any person(s) and incidental and consequential damages (collectively "Damages"), court costs, attorneys' fees, litigation expenses, fees of expert consultants or witnesses in litigation, and costs of investigation (collectively "Litigation Expenses"), that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the

alleged negligence, recklessness, or willful misconduct of Contractor, any subconsultant, anyone directly or indirectly employed by them, or anyone that they control (collectively, "Liabilities"). City will reimburse Contractor for the proportionate percentage of defense costs exceeding Contractor's proportionate percentage of fault as determined by a Court of competent jurisdiction.

5.3.2 Indemnity Obligations. To the fullest extent permitted by law, Contractor shall indemnify and hold harmless Indemnitees from and against any and all Liabilities, including but not limited to those for Damages or Litigation Expenses specified in Section 5.2.1.

5.3.3 Copyright Infringement. Contractor shall also indemnify, defend and hold harmless all Indemnitees from all suits or claims for infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark, or any other proprietary right of any person or persons in consequence of the use by the City, or any of its boards, commissions, officers, or employees of articles, work or deliverables supplied in the performance of Services. Infringement of patent rights, copyrights, or other proprietary rights in the performance of this Agreement, if not the basis for indemnification under the law, shall nevertheless be considered a material breach of contract.

5.3.4 Severability Clause Specific to Indemnification and/or Defense Obligations. To the extent any Court of competent jurisdiction or law invalidates any word, clause, phrase, or sentence herein that word, clause, phrase, or sentence, and no other portion, shall be deemed removed from this section. All other words, clauses, phrases and/or sentences remain enforceable to the fullest extent permitted by law.

Article 6 Liability of the Parties

6.1 Liability of City. CITY'S PAYMENT OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED FOR IN SECTION 3.3.1, "PAYMENT," OF THIS AGREEMENT. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, IN NO EVENT SHALL CITY BE LIABLE, REGARDLESS OF WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE SERVICES PERFORMED IN CONNECTION WITH THIS AGREEMENT.

6.2 Liability for Use of Equipment. City shall not be liable for any damage to persons or property as a result of the use, misuse or failure of any equipment used by Contractor, or any of its subcontractors, or by any of their employees, even though such equipment is furnished, rented or loaned by City.

6.3 Liability for Incidental and Consequential Damages. Contractor shall be responsible for incidental and consequential damages resulting in whole or in part from Contractor's acts or omissions.

Article 7 Payment of Taxes

7.1 Contractor to Pay All Taxes. Except for any applicable California sales and use taxes charged by Contractor to City, Contractor shall pay all taxes, including possessory interest

taxes levied upon or as a result of this Agreement, or the Services delivered pursuant hereto. Contractor shall remit to the State of California any sales or use taxes paid by City to Contractor under this Agreement. Contractor agrees to promptly provide information requested by the City to verify Contractor's compliance with any State requirements for reporting sales and use tax paid by City under this Agreement.

7.2 Possessory Interest Taxes. Contractor acknowledges that this Agreement may create a “possessory interest” for property tax purposes. Generally, such a possessory interest is not created unless the Agreement entitles the Contractor to possession, occupancy, or use of City property for private gain. If such a possessory interest is created, then the following shall apply:

7.2.1 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that Contractor, and any permitted successors and assigns, may be subject to real property tax assessments on the possessory interest.

7.2.2 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that the creation, extension, renewal, or assignment of this Agreement may result in a “change in ownership” for purposes of real property taxes, and therefore may result in a revaluation of any possessory interest created by this Agreement. Contractor accordingly agrees on behalf of itself and its permitted successors and assigns to report on behalf of the City to the County Assessor the information required by Revenue and Taxation Code section 480.5, as amended from time to time, and any successor provision.

7.2.3 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that other events also may cause a change of ownership of the possessory interest and result in the revaluation of the possessory interest. (see, e.g., Rev. & Tax. Code section 64, as amended from time to time). Contractor accordingly agrees on behalf of itself and its permitted successors and assigns to report any change in ownership to the County Assessor, the State Board of Equalization or other public agency as required by law.

7.2.4 Contractor further agrees to provide such other information as may be requested by the City to enable the City to comply with any reporting requirements for possessory interests that are imposed by applicable law.

7.3 Withholding. Contractor agrees that it is obligated to pay all amounts due to the City under the San Francisco Business and Tax Regulations Code during the term of this Agreement. Pursuant to Section 6.10-2 of the San Francisco Business and Tax Regulations Code, Contractor further acknowledges and agrees that City may withhold any payments due to Contractor under this Agreement if Contractor is delinquent in the payment of any amount required to be paid to the City under the San Francisco Business and Tax Regulations Code. Any payments withheld under this paragraph shall be made to Contractor, without interest, upon Contractor coming back into compliance with its obligations.

Article 8 Termination and Default

8.1 Termination for Convenience

8.1.1 City shall have the option, in its sole discretion, to terminate this Agreement, at any time during the term hereof, for convenience and without cause. City

shall exercise this option by giving Contractor written notice of termination. The notice shall specify the date on which termination shall become effective.

8.1.2 Upon receipt of the notice of termination, Contractor shall commence and perform, with diligence, all actions necessary on the part of Contractor to effect the termination of this Agreement on the date specified by City and to minimize the liability of Contractor and City to third parties as a result of termination. All such actions shall be subject to the prior approval of City. Such actions may include any or all of the following, without limitation:

(a) Halting the performance of all Services under this Agreement on the date(s) and in the manner specified by City.

(b) Terminating all existing orders and subcontracts, and not placing any further orders or subcontracts for materials, Services, equipment or other items.

(c) At City's direction, assigning to City any or all of Contractor's right, title, and interest under the orders and subcontracts terminated. Upon such assignment, City shall have the right, in its sole discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.

(d) Subject to City's approval, settling all outstanding liabilities and all claims arising out of the termination of orders and subcontracts.

(e) Completing performance of any Services that City designates to be completed prior to the date of termination specified by City.

(f) Taking such action as may be necessary, or as the City may direct, for the protection and preservation of any property related to this Agreement which is in the possession of Contractor and in which City has or may acquire an interest.

8.1.3 Within 30 days after the specified termination date, Contractor shall submit to City an invoice, which shall set forth each of the following as a separate line item:

(a) The reasonable cost to Contractor, without profit, for all Services prior to the specified termination date, for which Services City has not already tendered payment. Reasonable costs may include a reasonable allowance for actual overhead, not to exceed a total of 10% of Contractor's direct costs for Services. Any overhead allowance shall be separately itemized. Contractor may also recover the reasonable cost of preparing the invoice.

(b) A reasonable allowance for profit on the cost of the Services described in the immediately preceding subsection (a), provided that Contractor can establish, to the satisfaction of City, that Contractor would have made a profit had all Services under this Agreement been completed, and provided further, that the profit allowed shall in no event exceed 5% of such cost.

(c) The reasonable cost to Contractor of handling material or equipment returned to the vendor, delivered to the City or otherwise disposed of as directed by the City.

(d) A deduction for the cost of materials to be retained by Contractor, amounts realized from the sale of materials and not otherwise recovered by or credited to City, and any other appropriate credits to City against the cost of the Services or other work.

8.1.4 In no event shall City be liable for costs incurred by Contractor or any of its subcontractors after the termination date specified by City, except for those costs specifically listed in Section 8.1.3. Such non-recoverable costs include, but are not limited to, anticipated profits on the Services under this Agreement, post-termination employee salaries, post-termination administrative expenses, post-termination overhead or unabsorbed overhead, attorneys' fees or other costs relating to the prosecution of a claim or lawsuit, prejudgment interest, or any other expense which is not reasonable or authorized under Section 8.1.3.

8.1.5 In arriving at the amount due to Contractor under this Section, City may deduct: (i) all payments previously made by City for Services covered by Contractor's final invoice; (ii) any claim which City may have against Contractor in connection with this Agreement; (iii) any invoiced costs or expenses excluded pursuant to the immediately preceding subsection 8.1.4; and (iv) in instances in which, in the opinion of the City, the cost of any Service performed under this Agreement is excessively high due to costs incurred to remedy or replace defective or rejected Services, the difference between the invoiced amount and City's estimate of the reasonable cost of performing the invoiced Services in compliance with the requirements of this Agreement.

8.1.6 City's payment obligation under this Section shall survive termination of this Agreement.

8.2 Termination for Default; Remedies.

8.2.1 Each of the following shall constitute an immediate event of default ("Event of Default") under this Agreement:

(a) Contractor fails or refuses to perform or observe any term, covenant or condition contained in any of the following Sections of this Agreement:

3.5	Submitting False Claims.	10.10	Alcohol and Drug-Free Workplace
4.5	Assignment	10.13	Reserved. (Working with Minors)
Article 5	Insurance and Indemnity	11.10	Compliance with Laws
Article 7	Payment of Taxes	Article 13	Data and Security

(b) Contractor fails or refuses to perform or observe any other term, covenant or condition contained in this Agreement, including any obligation imposed by ordinance or statute and incorporated by reference herein, and such default is not cured within ten days after written notice thereof from City to Contractor. If Contractor defaults a second time in the same manner as a prior default cured by Contractor, City may in its sole discretion immediately terminate the Agreement for default or grant an additional period not to exceed five days for Contractor to cure the default.

(c) Contractor (i) is generally not paying its debts as they become due; (ii) files, or consents by answer or otherwise to the filing against it of a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction; (iii) makes an assignment for the benefit of its creditors; (iv) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers of Contractor or of any

substantial part of Contractor's property; or (v) takes action for the purpose of any of the foregoing.

(d) A court or government authority enters an order (i) appointing a custodian, receiver, trustee or other officer with similar powers with respect to Contractor or with respect to any substantial part of Contractor's property, (ii) constituting an order for relief or approving a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction or (iii) ordering the dissolution, winding-up or liquidation of Contractor.

8.2.2 On and after any Event of Default, City shall have the right to exercise its legal and equitable remedies, including, without limitation, the right to terminate this Agreement or to seek specific performance of all or any part of this Agreement. In addition, where applicable, City shall have the right (but no obligation) to cure (or cause to be cured) on behalf of Contractor any Event of Default; Contractor shall pay to City on demand all costs and expenses incurred by City in effecting such cure, with interest thereon from the date of incurrence at the maximum rate then permitted by law. City shall have the right to offset from any amounts due to Contractor under this Agreement or any other agreement between City and Contractor: (i) all damages, losses, costs or expenses incurred by City as a result of an Event of Default; and (ii) any liquidated damages levied upon Contractor pursuant to the terms of this Agreement; and (iii), any damages imposed by any ordinance or statute that is incorporated into this Agreement by reference, or into any other agreement with the City.

8.2.3 All remedies provided for in this Agreement may be exercised individually or in combination with any other remedy available hereunder or under applicable laws, rules and regulations. The exercise of any remedy shall not preclude or in any way be deemed to waive any other remedy. Nothing in this Agreement shall constitute a waiver or limitation of any rights that City may have under applicable law.

8.2.4 Any notice of default must be sent by registered mail to the address set forth in Article II.

8.3 **Non-Waiver of Rights.** The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions thereafter.

8.4 Rights and Duties upon Termination or Expiration.

8.4.1 This Section and the following Sections of this Agreement listed below, shall survive termination or expiration of this Agreement:

3.3.2	Payment Limited to Satisfactory Services	9.2	Works for Hire
3.4	Audit and Inspection of Records	11.6	Dispute Resolution Procedure

3.5	Submitting False Claims	11.7	Agreement Made in California; Venue
Article 5	Insurance and Indemnity	11.8	Construction
6.1	Liability of City	11.9	Entire Agreement
6.3	Liability for Incidental and Consequential Damages	11.10	Compliance with Laws
Article 7	Payment of Taxes	11.11	Severability
8.1.6	Payment Obligation	Article 13	Data and Security
9.1	Ownership of Results		

8.4.2 Subject to the survival of the Sections identified in Section 8.4.1, above, if this Agreement is terminated prior to expiration of the term specified in Article 2, this Agreement shall be of no further force or effect. Contractor shall transfer title to City, and deliver in the manner, at the times, and to the extent, if any, directed by City, any work in progress, completed work, supplies, equipment, and other materials produced as a part of, or acquired in connection with the performance of this Agreement, and any completed or partially completed work which, if this Agreement had been completed, would have been required to be furnished to City.

Article 9 Rights In Deliverables

9.1 **Ownership of Results.** Any interest of Contractor or its subcontractors, in the Deliverables, including any drawings, plans, specifications, blueprints, studies, reports, memoranda, computation sheets, computer files and media or other documents prepared by Contractor or its subcontractors for the purposes of this agreement, shall become the property of and will be transmitted to City. However, unless expressly prohibited elsewhere in this Agreement, Contractor may retain and use copies for reference and as documentation of its experience and capabilities.

9.2 **Works for Hire.** If, in connection with Services, Contractor or its subcontractors creates Deliverables including, without limitation, artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, blueprints, source codes, or any other original works of authorship, whether in digital or any other format, such works of authorship shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works shall be the property of the City. If any Deliverables created by Contractor or its subcontractor(s) under this Agreement are ever determined not to be works for hire under U.S. law, Contractor hereby assigns all Contractor's copyrights to such Deliverables to the City, agrees to provide any material and execute any documents necessary to effectuate such assignment, and agrees to include a clause in every subcontract imposing the same duties upon subcontractor(s). With City's prior written approval, Contractor and its subcontractor(s) may retain and use copies of such works for reference and as documentation of their respective experience and capabilities. Notwithstanding any other provision of this Agreement to the contrary, Contractor shall retain its rights in its pre-existing standard drawing details, designs, specifications, databases, computer software, proprietary information, documents, templates, and any other property owned by Contractor on the date of this Agreement or developed outside of this Agreement.

Article 10 Additional Requirements Incorporated by Reference

10.1 Laws Incorporated by Reference. The full text of the laws listed in this Article 10, including enforcement and penalty provisions, are incorporated by reference into this Agreement. The full text of the San Francisco Municipal Code provisions incorporated by reference in this Article and elsewhere in the Agreement ("Mandatory City Requirements") are available at http://www.amlegal.com/codes/client/san-francisco_ca/ .

10.2 Conflict of Interest. By executing this Agreement, Contractor certifies that it does not know of any fact which constitutes a violation of Section 15.103 of the City's Charter; Article III, Chapter 2 of City's Campaign and Governmental Conduct Code; Title 9, Chapter 7 of the California Government Code (Section 87100 *et seq.*), or Title 1, Division 4, Chapter 1, Article 4 of the California Government Code (Section 1090 *et seq.*), and further agrees promptly to notify the City if it becomes aware of any such fact during the term of this Agreement.

10.3 Prohibition on Use of Public Funds for Political Activity. In performing the Services, Contractor shall comply with San Francisco Administrative Code Chapter 12G, which prohibits funds appropriated by the City for this Agreement from being expended to participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure. Contractor is subject to the enforcement and penalty provisions in Chapter 12G.

10.4 Consideration of Salary History. Contractor shall comply with San Francisco Administrative Code Chapter 12K, the Consideration of Salary History Ordinance or "Pay Parity Act." Contractor is prohibited from considering current or past salary of an applicant in determining whether to hire the applicant or what salary to offer the applicant to the extent that such applicant is applying for employment to be performed on this Agreement or in furtherance of this Agreement, and whose application, in whole or part, will be solicited, received, processed or considered, whether or not through an interview, in the City or on City property. The ordinance also prohibits employers from (1) asking such applicants about their current or past salary or (2) disclosing a current or former employee's salary history without that employee's authorization unless the salary history is publicly available. Contractor is subject to the enforcement and penalty provisions in Chapter 12K. Information about and the text of Chapter 12K is available on the web at <https://sfgov.org/olse/consideration-salary-history>. Contractor is required to comply with all of the applicable provisions of 12K, irrespective of the listing of obligations in this Section.

10.5 Nondiscrimination Requirements.

10.5.1 Non Discrimination in Contracts. Contractor shall comply with the provisions of Chapters 12B and 12C of the San Francisco Administrative Code. Contractor shall incorporate by reference in all subcontracts the provisions of Sections 12B.2(a), 12B.2(c)-(k), and 12C.3 of the San Francisco Administrative Code and shall require all subcontractors to comply with such provisions. Contractor is subject to the enforcement and penalty provisions in Chapters 12B and 12C.

10.5.2 Nondiscrimination in the Provision of Employee Benefits. San Francisco Administrative Code 12B.2. Contractor does not as of the date of this Agreement, and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the City elsewhere in the United States, discriminate in the provision of employee benefits between employees with domestic partners and employees with spouses and/or between the domestic

partners and spouses of such employees, subject to the conditions set forth in San Francisco Administrative Code Section 12B.2.

10.6 Local Business Enterprise and Non-Discrimination in Contracting Ordinance. Contractor shall comply with all applicable provisions of Chapter 14B ("LBE Ordinance"). Contractor is subject to the enforcement and penalty provisions in Chapter 14B. Contractor shall utilize LBE Subcontractors for at least 10.90% of the Services except as otherwise authorized in writing by the Director of CMD. Contractor shall incorporate the requirements of the LBE Ordinance in each subcontract made in the fulfillment of Contractor's LBE subcontracting commitments.

10.7 Minimum Compensation Ordinance. If Administrative Code Chapter 12P applies to this contract, Contractor shall pay covered employees no less than the minimum compensation required by San Francisco Administrative Code Chapter 12P, including a minimum hourly gross compensation, compensated time off, and uncompensated time off. Contractor is subject to the enforcement and penalty provisions in Chapter 12P. Information about and the text of the Chapter 12P is available on the web at <http://sfgov.org/olse/mco>. Contractor is required to comply with all of the applicable provisions of 12P, irrespective of the listing of obligations in this Section. By signing and executing this Agreement, Contractor certifies that it complies with Chapter 12P.

10.8 Health Care Accountability Ordinance. If Administrative Code Chapter 12Q applies to this contract, Contractor shall comply with the requirements of Chapter 12Q. For each Covered Employee, Contractor shall provide the appropriate health benefit set forth in Section 12Q.3 of the HCAO. If Contractor chooses to offer the health plan option, such health plan shall meet the minimum standards set forth by the San Francisco Health Commission. Information about and the text of the Chapter 12Q, as well as the Health Commission's minimum standards, is available on the web at <http://sfgov.org/olse/hcao>. Contractor is subject to the enforcement and penalty provisions in Chapter 12Q. Any Subcontract entered into by Contractor shall require any Subcontractor with 20 or more employees to comply with the requirements of the HCAO and shall contain contractual obligations substantially the same as those set forth in this Section.

10.9 First Source Hiring Program. Contractor must comply with all of the provisions of the First Source Hiring Program, Chapter 83 of the San Francisco Administrative Code, that apply to this Agreement, and Contractor is subject to the enforcement and penalty provisions in Chapter 83.

10.10 Alcohol and Drug-Free Workplace. City reserves the right to deny access to, or require Contractor to remove from, City facilities personnel of any Contractor or subcontractor who City has reasonable grounds to believe has engaged in alcohol abuse or illegal drug activity which in any way impairs City's ability to maintain safe work facilities or to protect the health and well-being of City employees and the general public. City shall have the right of final approval for the entry or re-entry of any such person previously denied access to, or removed from, City facilities. Illegal drug activity means possessing, furnishing, selling, offering, purchasing, using or being under the influence of illegal drugs or other controlled substances for which the individual lacks a valid prescription. Alcohol abuse means possessing, furnishing, selling, offering, or using alcoholic beverages, or being under the influence of alcohol.

10.11 Limitations on Contributions. By executing this Agreement, Contractor acknowledges its obligations under section I.126 of the City's Campaign and Governmental

Conduct Code, which prohibits any person who contracts with, or is seeking a contract with, any department of the City for the rendition of personal services, for the furnishing of any material, supplies or equipment, for the sale or lease of any land or building, for a grant, loan or loan guarantee, or for a development agreement, from making any campaign contribution to (i) a City elected official if the contract must be approved by that official, a board on which that official serves, or the board of a state agency on which an appointee of that official serves, (ii) a candidate for that City elective office, or (iii) a committee controlled by such elected official or a candidate for that office, at any time from the submission of a proposal for the contract until the later of either the termination of negotiations for such contract or twelve months after the date the City approves the contract. The prohibition on contributions applies to each prospective party to the contract; each member of Contractor's board of directors; Contractor's chairperson, chief executive officer, chief financial officer and chief operating officer; any person with an ownership interest of more than 10% in Contractor; any subcontractor listed in the bid or contract; and any committee that is sponsored or controlled by Contractor. Contractor certifies that it has informed each such person of the limitation on contributions imposed by Section 1.126 by the time it submitted a proposal for the contract, and has provided the names of the persons required to be informed to the City department with whom it is contracting.

10.12 Reserved. (Slavery Era Disclosure)

10.13 Reserved. (Working with Minors)

10.14 Consideration of Criminal History in Hiring and Employment Decisions.

10.14.1 Contractor agrees to comply fully with and be bound by all of the provisions of Chapter 12T, "City Contractor/Subcontractor Consideration of Criminal History in Hiring and Employment Decisions," of the San Francisco Administrative Code ("Chapter 12T"), including the remedies provided, and implementing regulations, as may be amended from time to time. The provisions of Chapter 12T are incorporated by reference and made a part of this Agreement as though fully set forth herein. The text of the Chapter 12T is available on the web at <http://sfgov.org/olse/fco>. Contractor is required to comply with all of the applicable provisions of 12T, irrespective of the listing of obligations in this Section. Capitalized terms used in this Section and not defined in this Agreement shall have the meanings assigned to such terms in Chapter 12T.

10.14.2 The requirements of Chapter 12T shall only apply to a Contractor's or Subcontractor's operations to the extent those operations are in furtherance of the performance of this Agreement, shall apply only to applicants and employees who would be or are performing work in furtherance of this Agreement, and shall apply when the physical location of the employment or prospective employment of an individual is wholly or substantially within the City of San Francisco. Chapter 12T shall not apply when the application in a particular context would conflict with federal or state law or with a requirement of a government agency implementing federal or state law.

10.15 Reserved. (Public Access to Nonprofit Records and Meetings)

10.16 Food Service Waste Reduction Requirements. Contractor shall comply with the Food Service Waste Reduction Ordinance, as set forth in San Francisco Environment Code Chapter 16, including but not limited to the remedies for noncompliance provided therein.

10.17 Reserved. (Distribution of Beverages and Water)

10.18 Tropical Hardwood and Virgin Redwood Ban. Pursuant to San Francisco Environment Code Section 804(b), the City urges Contractor not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood or virgin redwood wood product.

10.19 Reserved. (Preservative Treated Wood Products)

Article 11 General Provisions

11.1 Notices to the Parties. Unless otherwise indicated in this Agreement, all written communications sent by the Parties may be by U.S. mail or e-mail, and shall be addressed as follows:

To City: Engineering Management Bureau
Attn: Colin Patton
525 Golden Gate Ave. 11th Fl.
San Francisco, CA 94102
Phone: 415-551-4691
Email: CPatton@sfwater.org

To Contractor: CDM Smith, Inc.
Attn: Tom Frisher
220 Montgomery St. Suite 1418
San Francisco, CA 94104
Phone: 415-495-6201
Email: FrisherTR@cdmsmith.com

Any notice of default must be sent by registered mail. Either Party may change the address to which notice is to be sent by giving written notice thereof to the other Party. If email notification is used, the sender must specify a receipt notice.

11.2 Compliance with Americans with Disabilities Act. Contractor shall provide the Services in a manner that complies with the Americans with Disabilities Act (ADA), including but not limited to Title II's program access requirements, and all other applicable federal, state and local disability rights legislation.

11.3 Incorporation of Recitals. The matters recited above are hereby incorporated into and made part of this Agreement.

11.4 Sunshine Ordinance. Contractor acknowledges that this Agreement and all records related to its formation, Contractor's performance of Services, and City's payment are subject to the California Public Records Act, (California Government Code §6250 et. seq.), and the San Francisco Sunshine Ordinance, (San Francisco Administrative Code Chapter 67). Such records are subject to public inspection and copying unless exempt from disclosure under federal, state or local law.

11.5 Modification of this Agreement. This Agreement may not be modified, nor may compliance with any of its terms be waived, except as noted in Section 11.1, "Notices to Parties," regarding change in personnel or place, and except by written instrument executed and approved in the same manner as this Agreement. Contractor shall cooperate with Department to submit to the Director of CMD any amendment, modification, supplement or change order that

would result in a cumulative increase of the original amount of this Agreement by more than 20% (CMD Contract Modification Form).

11.6 Dispute Resolution Procedure.

11.6.1 Negotiation; Alternative Dispute Resolution. The Parties will attempt in good faith to resolve any dispute or controversy arising out of or relating to the performance of services under this Agreement. If the Parties are unable to resolve the dispute, then, pursuant to San Francisco Administrative Code Section 21.36, Contractor may submit to the Contracting Officer a written request for administrative review and documentation of the Contractor's claim(s). Upon such request, the Contracting Officer shall promptly issue an administrative decision in writing, stating the reasons for the action taken and informing the Contractor of its right to judicial review. If agreed by both Parties in writing, disputes may be resolved by a mutually agreed-upon alternative dispute resolution process. If the parties do not mutually agree to an alternative dispute resolution process or such efforts do not resolve the dispute, then either Party may pursue any remedy available under California law. The status of any dispute or controversy notwithstanding, Contractor shall proceed diligently with the performance of its obligations under this Agreement in accordance with the Agreement and the written directions of the City. Neither Party will be entitled to legal fees or costs for matters resolved under this section.

11.6.2 Government Code Claim Requirement. No suit for money or damages may be brought against the City until a written claim therefor has been presented to and rejected by the City in conformity with the provisions of San Francisco Administrative Code Chapter 10 and California Government Code Section 900, et seq. Nothing set forth in this Agreement shall operate to toll, waive or excuse Contractor's compliance with the California Government Code Claim requirements set forth in San Francisco Administrative Code Chapter 10 and California Government Code Section 900, et seq.

11.7 Agreement Made in California; Venue. The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

11.8 Construction. All paragraph captions are for reference only and shall not be considered in construing this Agreement.

11.9 Entire Agreement. This contract sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. This Agreement may be modified only as provided in Section 11.5, "Modification of this Agreement."

11.10 Compliance with Laws. Contractor shall keep itself fully informed of the City's Charter, codes, ordinances and duly adopted rules and regulations of the City and of all state, and federal laws in any manner affecting the performance of this Agreement, and must at all times comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time.

11.11 Severability. Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (i) the validity of other provisions of this Agreement shall not be affected or

impaired thereby, and (ii) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.

11.12 Cooperative Drafting. This Agreement has been drafted through a cooperative effort of City and Contractor, and both Parties have had an opportunity to have the Agreement reviewed and revised by legal counsel. No Party shall be considered the drafter of this Agreement, and no presumption or rule that an ambiguity shall be construed against the Party drafting the clause shall apply to the interpretation or enforcement of this Agreement.

11.13 Order of Precedence. Contractor agrees to perform the services described below in accordance with the terms and conditions of this Agreement, implementing task orders, the RFP, and Contractor's proposal dated August 29, 2019. The RFP and Contractor's proposal are incorporated by reference as though fully set forth herein. Should there be a conflict of terms or conditions, this Agreement and any implementing task orders shall control over the RFP and the Contractor's proposal. If the Appendices to this Agreement include any standard printed terms from the Contractor, Contractor agrees that in the event of discrepancy, inconsistency, gap, ambiguity, or conflicting language between the City's terms and Contractor's printed terms attached, the City's terms shall take precedence, followed by the procurement issued by the department, Contractor's proposal, and Contractor's printed terms, respectively.

11.14 Notification of Legal Requests. Contractor shall immediately notify City upon receipt of any subpoenas, service of process, litigation holds, discovery requests and other legal requests ("Legal Requests") related to all data given to Contractor by City in the performance of this Agreement ("City Data" or "Data"), or which in any way might reasonably require access to City's Data, and in no event later than 24 hours after it receives the request. Contractor shall not respond to Legal Requests related to City without first notifying City other than to notify the requestor that the information sought is potentially covered under a non-disclosure agreement. Contractor shall retain and preserve City Data in accordance with the City's instruction and requests, including, without limitation, any retention schedules and/or litigation hold orders provided by the City to Contractor, independent of where the City Data is stored.

Article 12 Department Specific Terms

12.1 Reserved.

Article 13 Data and Security

13.1 Nondisclosure of Private, Proprietary or Confidential Information.

13.1.1 Protection of Private Information. If this Agreement requires City to disclose "Private Information" to Contractor within the meaning of San Francisco Administrative Code Chapter 12M, Contractor and subcontractor shall use such information only in accordance with the restrictions stated in Chapter 12M and in this Agreement and only as necessary in performing the Services. Contractor is subject to the enforcement and penalty provisions in Chapter 12M.

13.1.2 Confidential Information. In the performance of Services, Contractor may have access to City's proprietary or Confidential Information, the disclosure of which to third parties may damage City. If City discloses proprietary or Confidential Information to Contractor, such information must be held by Contractor in confidence and used only in performing the Agreement. Contractor shall exercise the same standard of care

to protect such information as a reasonably prudent contractor would use to protect its own proprietary or Confidential Information.

13.2 Reserved. (Payment Card Industry [“PCI”] Requirements)

13.3 Reserved. (Business Associate Agreement)

13.4 Management of City Data and Confidential Information

13.4.1 Access to City Data. City shall at all times have access to and control of all data given to Contractor by City in the performance of this Agreement (“City Data” or “Data”), and shall be able to retrieve it in a readable format, in electronic form and/or print, at any time, at no additional cost.

13.4.2 Use of City Data and Confidential Information. Contractor agrees to hold City's Confidential Information received from or created on behalf of the City in strictest confidence. Contractor shall not use or disclose City's Data or Confidential Information except as permitted or required by the Agreement or as otherwise authorized in writing by the City. Any work using, or sharing or storage of, City's Confidential Information outside the United States is subject to prior written authorization by the City. Access to City's Confidential Information must be strictly controlled and limited to Contractor's staff assigned to this project on a need-to-know basis only. Contractor is provided a limited non-exclusive license to use the City Data or Confidential Information solely for performing its obligations under the Agreement and not for Contractor's own purposes or later use. Nothing herein shall be construed to confer any license or right to the City Data or Confidential Information, by implication, estoppel or otherwise, under copyright or other intellectual property rights, to any third-party. Unauthorized use of City Data or Confidential Information by Contractor, subcontractors or other third-parties is prohibited. For purpose of this requirement, the phrase “unauthorized use” means the data mining or processing of data, stored or transmitted by the service, for commercial purposes, advertising or advertising-related purposes, or for any purpose other than security or service delivery analysis that is not explicitly authorized.

13.4.3 Disposition of Confidential Information. Upon termination of Agreement or request of City, Contractor shall within forty-eight (48) hours return all Confidential Information which includes all original media. Once Contractor has received written confirmation from City that Confidential Information has been successfully transferred to City, Contractor shall within ten (10) business days purge all Confidential Information from its servers, any hosted environment Contractor has used in performance of this Agreement, work stations that were used to process the data or for production of the data, and any other work files stored by Contractor in whatever medium. Contractor shall provide City with written certification that such purge occurred within five (5) business days of the purge.

Article 14 MacBride And Signature

14.1 MacBride Principles - Northern Ireland. The provisions of San Francisco Administrative Code §12F are incorporated herein by this reference and made part of this Agreement. By signing this Agreement, Contractor confirms that Contractor has read and understood that the City urges companies doing business in Northern Ireland to resolve

employment inequities and to abide by the MacBride Principles, and urges San Francisco companies to do business with corporations that abide by the MacBride Principles.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

CITY

CONTRACTOR



Harlan L. Kelly, Jr.
General Manager
San Francisco Public Utilities Commission

CDM Smith, Inc.



Hala Titus
Vice President
220 Montgomery St. Suite 1418
San Francisco, CA 94104

City Supplier Number: 0000023206

Approved as to Form:

Dennis J. Herrera
City Attorney

By: 
Randy Parent
Deputy City Attorney

Appendices

- A: Scope of Services
- B: Calculation of Charges

**Appendix A
Scope of Services**

1. Description of Services. Contractor agrees to perform the following Services:

1.1 Introduction

The Consultant, working under the direction of the Project Manager and Project Engineer in the SFPUC Infrastructure Division, shall provide planning and design expertise in the latest technologies and trends in water treatment and in high voltage electrical substations and transmission lines for the Project. All work shall conform to SFPUC Infrastructure Division Procedures.

Preliminary planning, to date, shows a Project duration of approximately six (6) years. The SFPUC reserves the right to commence, close, reduce or extend consultant services at any time in response to changing needs.

1.2 General Description of Tasks

This Agreement includes the services of a consultant to provide planning, design, bid & award support, engineering support during construction, and overall coordination in support of the Project.

The primary role of the consultant will be to perform the following tasks, and other tasks relevant to the SVWTP Ozonation and Improvements project identified in the Agreement and Request for Proposal, including but not limited to:

Table 3-1: Summary of Tasks

Task	Scope of Work
Detailed Description of Tasks	
1	Management
2	Ozonation System Design
3	Calaveras Substation Upgrade Design
4	Engineering Support (Optional)
5	Land Needs and Property Acquisition (Optional)

For detailed design work, refer to Section 3.4, General Obligations of the RFP.

1.3 Detailed Description of Tasks

The Consultant shall expand upon the following description of work and/or add tasks to fully identify work and work products in its proposals. The Consultant must receive City

authorization by specific and individual task orders prior to performing Work under the Consultant Agreement. The Consultant Agreement will set forth the agreed upon rates of compensation and the other general terms and conditions applicable to the Consultant Services. Each task order developed by the Consultant and executed by the SFPUC will detail the parameters and requirements of the Consultant Services. Consultant-provided details will include the scope of services to be performed, the format and schedule for deliverables, the schedule of performance, and the schedule for compensation. The compensation will be stated in each task order on a not-to-exceed basis and include the total payment for professional services, including reimbursable expenses, additional services, supplies, materials, and equipment. Any unauthorized services performed by the Consultant shall be at no cost to the SFPUC.

TASK 1- MANAGEMENT

1.1 – Management and Coordination of Consultant’s Services

The Consultant will be responsible for providing coordination to keep project participants informed of progress, technical issues, and planned activities and events. Project participants include, but will not be limited to, SFPUC staff in project management, engineering, planning and public outreach; independent experts; and other parties such as public agencies, contractors, and other Consultants. For scheduling of design submittals, the Consultant must include three weeks for SFPUC review of each Consultant deliverable, unless otherwise noted. Perform coordination activities described below.

- Based on the Project Task Descriptions below, and the Overhead and Profit Schedule (Section 5.2.8 of the RFP) submitted with the proposal, prepare a Draft Project Management Plan (PMP) within two (2) weeks following NTP for review and acceptance by the SFPUC. The Consultant shall submit the Final PMP including all applicable comments within five (5) weeks of the NTP. The PMP is intended to lay the groundwork for efficient execution of contracted engineering services. The PMP must include the following elements:
 - Project team organization and responsibility including all contact information for key team members;
 - List of tasks and corresponding staff and budget;
 - Detailed Critical Path Method (CPM) design schedule of tasks, milestones and deliverable due dates;
 - Quality Assurance/Quality Control procedures, including but not limited to: procedures for reviewing, distributing, checking, tracking, controlling, and documentation of all work; procedures for resolution of review comments.
 - File management for project record sharing/keeping and coordination guidelines to allow integration with project team members within SFPUC, Consultant firms, and others. A common web-based document management platform specifically Microsoft SharePoint, will be used by project team members, to store, manage and share documents and files. Microsoft SharePoint will allow for efficient file management and staff collaboration.

- Prepare for and attend project kick-off meeting to review tasks, milestones, roles, and communication and coordination processes. The Work Plan will be discussed during orientation meeting.
- Prepare for and attend coordination progress meetings every 2 weeks for the duration of the contract. Assume one (1) hour per meeting between SFPUC staff and up to two (2) senior project staff from the Consultant.
- Prepare and make a presentation as required by SFPUC's Infrastructure Division Procedures at the AAR, CER, 35%, 65%, 95%, 100% deliverable milestones for each construction package. Consultant will be required to lead these presentations and will be required to prepare all necessary graphics and PowerPoint slides. Consultant shall document the meetings by producing project meeting minutes for distribution. Prepare for and participate in a minimum of three (3) design coordination workshops. Each design workshop shall be half day and shall be coordinated between the Consultant and SFPUC after the 35%, 65%, and 95% deliverable presentations. Consultant will be required to lead these presentations and will be required to prepare all necessary graphics and PowerPoint slides. Consultant shall submit presentation material to the SFPUC in advance of the presentation for review and comment. Consultant shall document the meetings by producing project meeting minutes for distribution.
- Submit monthly progress reports, with highlights of work achievements during the past month, and work planned and important milestones for the upcoming month. Also for each task, provide: (1) suggested updates to schedule (for discussion); (2) estimate of actual (not based on budget) percent complete; and (3) summary of current expenditures (man hours, expenditures, and percent of task budget expended). The report shall identify any issues or scope changes that may affect overall cost and/or schedule of design and/or construction.
- Maintain project files including all plans, reports, correspondence, calculations, and other documents pertaining to the design. All documents shall be fully checked and signed off in accordance with the Quality Assurance/Quality Control (QA/QC) procedures.
- Coordinate review comments provided by others on reports, memoranda, contract documents and other work products. Document and disseminate responses to review comments.
- Prepare for and participate in public outreach meetings/ workshops, as needed.

Task 1.1 Key Deliverables:

1.1.A. Draft PMP, three (3) hard copies and one copy in digital format, within two (2) weeks from NTP.

1.1.B. Final PMP, three (3) hard copies and one copy in digital format, within five (5) weeks from NTP.

1.1.C. Meeting minutes for project meetings and workshops, one copy in digital format.

1.1.D. Monthly Progress Reports, one copy in digital format, within five (5) calendar days after the end of each month.

1.1.E. Project correspondence, calculations, and other project records, one copy in digital or hard copy format within twenty (20) working days of the 100%

1.1.F. All deliverables will be signed off by the City.

1.1.G. Presentation materials - one copy in digital format.

1.2 – Training and Technology Transfer (Optional Task)

The Consultant shall conduct training sessions in areas related to the scope of services in this RFP, with the objective of transferring technical design knowledge and skills to City staff. While training topics will be determined jointly with City, potential training topics may include but are not limited to the following: treatment technologies, facility operation and start-up, BIM, and/or lessons learned.

Services to be provided under this task include preparing, coordinating, and providing training sessions, both in the field and in the office. These training sessions (field visits and in-office seminars) shall be independent of the other workshops held for this project and other services provided for other tasks. Parts of the documents developed under other tasks can be used as some of the training material. Training sessions will take place in a location as designated by the City.

Task 1.2 Key Deliverables:

1.2.A. Training material, in electronic (Word, Excel, and pdf) format

1.2.B. Handouts, diagrams, etc. to be used in classroom and/or field

TASK 2 –OZONATION SYSTEM DESIGN

2.1 – Review of Background Information

This task includes Consultant’s review of relevant available project documents from available resources. At a minimum, the Consultant shall review the following:

- Documents listed in Section 2.3.3, Background Documents of the RFP
- SFPUC Infrastructure Division Project Design Procedures
- Relevant record drawings of the SVWTP
- Regulatory and operating permits for the treatment plant operation, excluding resource agency permits for construction.
- Available geotechnical and hazardous materials investigation reports for the areas located in the vicinity of this project from the SFPUC and other City agencies such as San Francisco Department of Building Inspection (SFDBI) and SFDPW. Also any available geotechnical and hazardous material investigation reports from other public/private projects/entities.
- SFPUC Health and Safety Guidelines

- General Seismic Requirements for Design of New Facilities and Upgrade of Existing Facilities, Revision 2 (EMB, October 2009 and any subsequent revisions)
- Additional materials suggested for review include, but are not limited to, surveying data; aerial photos; topographic maps; right-of-way (ROW) maps; impact avoidance and mitigation studies; design and as-built drawings related to the existing facilities; and information related to environmental studies.

Task 2.1 Key Deliverables:

2.1.A. Draft and Final Technical Memoranda confirming the adequacy and applicability of information presented in the background documentation; identifying any data gaps (especially any geotechnical or hazardous material information) that must be completed during the planning and design phases of the project; and presenting a schedule and plan for addressing the data gaps. If necessary, a recommended scope of work and budget to obtain additional data shall be submitted with the plan. Provide three (3) hard copies and one (1) digital copy.

2.2 – Surveying Information

Consultant will perform any surveying needed to complete the detailed design. Surveying will be based on the NAD 83 horizontal datum and NAVD 88 vertical datum.

- Develop Survey Information. Perform land surveys and aerial surveys and prepare maps for areas within the boundaries of the proposed Project site. Develop topographic information for inclusion in background/contract drawings for the Project facilities for construction bids. Consultant to determine and work with City for appropriate datum, grid size, scale, and resolution.
- Coordinate and obtain necessary approvals from local agencies, private owners, and utilities through City representatives for survey work. Obtain access and/or permits required to accomplish necessary surveying by completing and processing permit applications, and by providing technical support, as needed, to secure these permits. Any costs for permits will be reimbursed back to the Consultant with proper receipts/documentations via progress payments.

Task 2.2 Key Deliverables:

2.2.A. Background Drawings - Provide background drawings, in both AutoCAD (latest City version) electronic format and hard copy, containing topographic information. For the drawing submittal, furnish two (2) bound full-size sets and one (1) set of the drawings in electronic AutoCAD Civil 3D 2018 format.

2.2.B. Survey Information - Submit five (5) hard copies and one (1) electronic copy of survey field notes and data and other backup information used in developing background drawings.

2.3 – Utility Information

Consultant shall gather, identify, and document all utility information within and surrounding the SVWTP. Consultant will work with City staff to coordinate with utilities to obtain existing utility records. The following are the responsibilities of the Consultant under this task during Planning and Design Phases.

- Prepare a Pothole sampling plan that identifies the utilities or underground facilities to be verified that may conflict with the proposed Project elements. Include information on the methodologies (shallow versus deep) to be used to perform the potholing, list of equipment, soil quantities and handling, site plan with pothole locations, size, access route, staging and storage areas, site restoration, and work schedule.
- Coordinate all field work with the Project Engineer for proper access and environmental permitting.
- Perform the potholing and subsurface investigations needed for detailed design.
- Prepare AutoCAD maps/layers showing the location of the existing utilities. This will be part of the overall site drawings for the project.
- Coordinate and provide design or design support for any required relocation of utilities or facilities (public or private).

Task 2.3 Key Deliverables:

2.3.A. Pothole sampling plan - Prepare and submit three (3) hard copies and one (1) text-searchable electronic copy.

2.3.B. Utilities and Facilities Coordination Technical Memorandum - Prepare and submit three (3) hard copies and one (1) text-searchable electronic copy of a technical memorandum package summarizing the results of utilities and facilities field location work. The technical memorandum and accompanying documents shall record field information on utilities and facilities that may conflict with the proposed project elements. It shall identify and record existing and abandoned utilities and facilities, utilities and facilities requiring relocation, and proposed utilities and facilities that would be impacted by the proposed project elements, list of equipment, soil handling, site restoration, and work schedule. The TM should provide at a minimum an overall site map of all the potholing locations; a table listing the pothole identification number, pothole coordinates, depth of pothole activity, and utility or underground facility identified; any pictures related to the potholing activities.

2.3.C. AutoCAD maps/layers showing the type, size, and location of active and abandoned utilities. These maps will be submitted to the owners of the utilities and returned for confirmation.

2.4 – Geotechnical and Hazardous Material Investigation

Consultant shall identify and conduct any geotechnical investigation and hazardous material site characterization needed to complete the detailed design. Coordinate all field work with the Project Engineer for proper access and environmental permitting. Consultant shall use the geotechnical information to determine the site-specific design criteria to use as the basis of

design, including all geotechnical and seismic hazards information such as, but not limited to, depth of piles, lateral spread, site-specific ground motion, and liquefaction potential.

Task 2.4 Key Deliverables:

2.4.A. Draft and Final Technical Geotechnical and Hazardous Material Investigation and Site Characterization Work Plan – The Plan will include at a minimum the number of borings and wells, the necessary depths, testing methods and protocols, samples to be taken, schedule, and permits needed for fieldwork. Provide three (3) hard copies and one (1) text-searchable digital copy.

2.4.B. Draft and Final Technical Geotechnical and Hazardous Material Investigation and Site Characterization Data Report (GDR) – The report shall provide factual data and information obtained from the geotechnical, groundwater, and hazmat investigation efforts. Provide three (3) hard copies and one (1) text-searchable digital copy.

2.4.C. Draft and Final Technical Geotechnical Interpretive Report (GIR) – The report is to provide interpretation of information and recommendations to be used in project design, including any shoring constraints and monitoring necessary to prevent setting of adjacent buildings/basins/facilities. Provide three (3) hard copies and one (1) text-searchable digital copy.

2.5 – Conceptual Engineering Report

The Conceptual Engineering Report (CER) will contain preliminary design criteria and preliminary site layouts to document the basis of design.

Consultant shall prepare a CER in accordance with SFPUC standards. The CER, at a minimum should address, if applicable:

- Preliminary design criteria (civil, seismic, pipelines, electrical, architectural, mechanical, HVAC, fire protection, instrumentation, process, corrosion);
- Critical equipment list and associated equipment data information (capacity, horsepower, type, etc.);
- Materials selection;
- Implement asset numbering system;
- Develop draft control strategy;
- Develop preliminary SCADA requirements;
- Develop plant electrical load study analyzing the plant including new ozonation demands, harmonics, power factor, transient loads, backup power, and voltage drop considerations. Study shall be shared with approved Ozonation equipment manufacturers to ensure both plant and new Ozonation equipment are able to operate compatibly;
- Process operating descriptions and strategies (incorporating input from Operations Staff);
- Permit requirements;
- Construction sequencing;
- Prepare preliminary Project Risk Matrix;
- Preliminary fault current calculation;
- Construction and O&M cost estimates;

- Draft specifications section list;
- Draft drawing list;
- Prepare Draft and Final CEQA Checklist, per Infrastructure Procedures PM 7.01, Environmental Review Implementation.

Task 2.5 Key Deliverables:

2.5.A. Draft and Final Conceptual Engineering Report. Three (3) hard draft copies and one (1) text-searchable digital copy. Three (3) final hard copies and one (1) text-searchable digital copy, within two (2) weeks of receiving City’s comments. All reference information (reports, technical memorandums, drawings, response to comment logs, etc.) shall be included electronically as reference material for the CER. The CER shall be stamped and signed by a Professional Engineer licensed in the State of California.

2.5.B Draft and Final CEQA Checklist. Three (3) hard draft copies and one (1) text-searchable digital copy.

2.6 – Design Criteria Report

SFPUC policies and procedures dictate that each project must establish Design Criteria including requirements for developing the design recommended in the Conceptual Engineering Report (CER). The Design Criteria provides the design basis, specific site conditions, functional and operational requirements, extent of the design, loads, codes and standards for the design, and particular methodologies (including software) to be used for design. Design Criteria must be finalized by the time the 35% Design package is issued. Once established, the Design Criteria will serve both to guide the designers' work and as the most fundamental basis for quality review of the design and design products (i.e., Drawings and Specifications).

The Design Criteria will be based on inclusion and expansion of criteria supplied by the SFPUC, most particularly the seismic requirements as defined by the General Seismic Requirements For Design of New Facilities and Upgrade of Existing Facilities, Revision 2 dated October 6, 2009 as issued by the SFPUC Infrastructure Division Engineering Management Bureau and any subsequent revisions.

Develop a Design Criteria document that conforms to the SFPUC policies and procedures. The design criteria must contain at a minimum the following categories of information, if applicable:

- Project purpose;
- Site Description;
- Project Background;
- Summary of Project Goals and Improvements;
- Existing Constraints;
- General codes, references, and project criteria;
- Demolition;
- Process Design;

- Geotechnical Design;
- Seismic Design;
- Civil Design;
- Electrical Design;
- Pipeline Design;
- Instrumentation (P&IDs);
- Corrosion Control;
- Supervisory Control and Data Acquisition (SCADA) integration;
- Process Mechanical Design;
- HVAC;
- Plumbing;
- Fire Protection;
- Fire Alarm;
- Structural Design;
- Architectural Design;
- Landscape Architecture Design;
- Safety;
- Security;
- Tie-in restrictions
- Noise and Vibration Criteria; and
- Constructability.

Task 2.6 Key Deliverables:

2.6.A. Draft and Final Design Criteria - five (5) hard draft copies and one (1) text-searchable digital copy. Response to comments log and three (3) final hard copies and one (1) text-searchable digital copy, within two (2) weeks of receiving City's comments. The Design Criteria shall be stamped and signed by a Professional Engineer licensed in the State of California.

2.7 – Detailed Design

Provide engineering and design services to perform, document, and prepare 35%, 65%, 95%, and 100% design packages as per Section 1.4 – General Obligations. Design shall be developed using a 3D BIM (Building Information Modeling) model based on the Autodesk® design software tools.

Task 2.7 Key Deliverables:

2.7.A. 35% design package including preliminary construction schedule and cost estimate - Fifteen (15) hard draft copies and one (1) digital copy in Adobe Acrobat PDF.

2.7.B. 65% design package including construction schedule and cost estimate - Fifteen (15) hard draft copies and one (1) digital copy in Adobe Acrobat PDF.

2.7.C. 95% design package including construction schedule and cost estimate - Fifteen (15) hard draft copies and one (1) digital copy in Adobe Acrobat PDF.

2.7.D. 99% printcheck set of drawings. Two (2) half size bound hard copies and one (1) shall be provided for SFPUC to review prior to printing 100% construction drawings for signatures.

2.7.E. 100% construction bid package stamped and signed by Professional Engineers licensed in the State of California. One full-size set on bonded paper shall be provided for SFPUC signatures. Consultant shall scan the full-size set (with SFPUC signatures) to produce full-size and half-size documents for construction bid purposes. Consultant shall also provide one (1) digital copy in Adobe Acrobat PDF, AutoCAD, and MS Word.

2.7.F. 100% design 3D BIM model based on the Autodesk® design software tools.

TASK 3 – CALAVERAS SUBSTATION UPGRADE DESIGN

With the planned addition of Ozonation to the SVWTP, the Calaveras Substation, associated equipment, and transmission lines are potentially in need of an upgrade to increase capacity. The upgrades are dictated primarily by the concurrent operational needs of the SVWTP and San Antonio Pump Station (SAPS). Two power studies have been conducted looking at different operational scenarios of these two facilities and the ramifications to the power supply. Further studies and analysis will be needed to refine the future facility needs and what will be required of the upgrade.

3.1 – Review of Background Information

In addition to the relevant documents described under Task 2 – Ozonation System Design, subtask 2.1 above, the Consultant shall review the following:

- Relevant record drawings of the Calaveras Substation
- Available utilities information for the areas located in the vicinity of this project from SFPUC libraries
- Record drawings of other facilities located in close proximity to this project, e.g. Caltrans, PG&E, etc., to locate all existing utilities and structures within the project area

3.2 – Surveying Information

Scope of work and deliverables are identical to that described in Task 2 – Ozonation System Design, subtask 2.2 above.

3.3 – Utility Information

Scope of work and deliverables are identical to that described in Task 2 – Ozonation System Design, subtask 2.3 above.

3.4 – Geotechnical and Hazardous Material Investigation

Scope of work and deliverables are identical to that described in Task 2 – Ozonation System Design, subtask 2.4 above.

3.5 – Alternatives Analysis Report

The Consultant will identify, develop, and compare alternatives and make recommendations to assist the SFPUC in selecting the preferred alternative that will be carried forward for further development in the CER and detailed design phases. The Consultant may need to review and analyze additional information provided by the SFPUC, verify previous assumptions, develop/update models as required, and perform additional analyses.

As part of this effort, the Consultant shall:

- Review previous studies and information from relevant documents to confirm the loads needed to serve the valley’s future power demands;
- Evaluate technology alternatives and provide recommendations for selection of equipment;
- Develop cost and schedule comparisons between preferred alternatives using life-cycle costs;
- Evaluate site access for operations and maintenance staff;
- Evaluate future SFPUC staffing and O&M needs;
- Evaluate constructability issues and Develop phasing plan for construction and equipment installation of the Project.

The Consultant shall develop evaluation criteria and a decision-making process upon which the proposed alternatives will be evaluated. Consultant shall prepare a Class 5 Opinion of Probable Construction Cost (“OPCC”) for each of the alternatives identified. The OPCCs shall be prepared to a level of accuracy consistent with the standards of AACE International.

Task 3.5 Key Deliverables:

3.5.A. Draft and Final Alternatives Analysis Report with Recommended Alternative – Three (3) hard draft copies and one (1) text-searchable digital copy. Three (3) final hard copies and one (1) text-searchable digital copy, within two (2) weeks of receiving City’s comments. All reference information (NAR, reports, technical memorandums, drawings, response to comments log, etc.) shall be included electronically as reference material for the AAR. The AAR shall be stamped and signed by a Professional Engineer licensed in the State of California.

3.6 – Conceptual Engineering Report

Scope of work and deliverables are identical to that described in Task 2 – Ozonation System Design, subtask 2.5 above.

3.7 – Design Criteria Report

Scope of work and deliverables are identical to that described in Task 2 – Ozonation System Design, subtask 2.6 above.

3.8 – Detailed Design

Scope of work and deliverables are identical to that described in Task 2 –Ozonation System Design, subtask 2.7 above except design will not be modeled in 3D using Autodesk® design software tools

TASK 4 – ENGINEERING SUPPORT (OPTIONAL TASK)

4.1 – Engineering Support During Environmental Review Phase

In support and at the direction of the Project Engineer, the Consultant may be requested to provide engineering support for the preparation of any CEQA documentation needed for the Project.

Task 4.1 Key Deliverables:

4.1.A. Deliverables will be defined when the scope of work is determined.

For budgeting purposes and the preparation of the Overhead and Profit Schedule, provide an allowance of \$200,000 for this optional task. Please do not use this task and/or its budget to satisfy the LBE goal requirements.

4.2 – Engineering Support During Bid and Award

Consultant shall attend and assist at a pre-bid conference (2 hours) and pre-bid site walk (1 hour each) for this construction package. Consultant will prepare all material related to the pre-bid site walk. Consultant shall review and respond to bidders (general contractors, subcontractors, and manufacturer’s representatives) questions on bid documents (QBD). Consultant shall prepare addenda text and drawings (in AutoCAD) describing clarifications and revisions to the design as required. Consultant shall provide revised AutoCAD drawings showing all changes outlined in the addenda to the City as part of the addenda. All addenda drawings and sketches shall be stamped and signed by a Professional Engineer licensed in the State of California. Consultant is responsible for producing conformed drawing and specification set. City will be responsible for reproduction. Consultant may be asked to assist the City in reviewing and analyzing received bids or proposals.

Task 4.2 Key Deliverables:

4.2.A. Responses to QBDs in electronic (Word, Excel, and pdf) format

4.2.B. Addendums in paper and electronic (Word, Excel, AutoCAD, and pdf) format using the latest City versions. Two (2) hard draft copies and one (1) text-searchable digital copy.

4.2.C. Technical Memorandum on bid evaluation – if requested by the City

4.3 – Engineering Support During Construction (ESDC) and Closeout

The Consultant will provide engineering support during construction (ESDC) and closeout. Provide engineering support to the City for each construction package during the construction and closeout phases including but not limited to the following:

- Attend Partnering sessions;

- Review and provide written responses to shop drawings, submittals, request for information (RFIs), change orders requests (CORs), and substitution requests from the Contractor through the City;
- Provide revised drawings (in AutoCAD) for design or owner requested changes;
- Assist the Construction Management (CM) staff in responding to and negotiating claims and developing proposed change orders;
- Attend and participate in project progress meetings at the site and issue-specific meetings at job sites and City offices (as needed);
- Identify construction phase items requiring presence of engineer in the field and coordinate with the Project Engineer. Provide field engineering support to CM team during construction;
- Support SFPUC staff with Permitting
- Review value engineering proposals from the contractor;
- Review contractor submitted operations and maintenance manuals, redlines and Equipment Data Sheets;
- Provide startup, testing, and commissioning support.
- Update and finalize operations and maintenance manual (drafts per Section 3.4 General Obligations – 95% of the RFP).

Task 4.3 Key Deliverables:

4.3.A. Responses to inquires as related to shop drawings, submittals, RFIs, change orders and/or substitution requests, in electronic (Word, Excel, and pdf) format.

4.3.B. Revised drawings and/or specifications, in paper and electronic (Word, Excel, AutoCAD, and pdf) format using the latest City versions. Two (2) hard copies and one (1) text-searchable digital copy.

4.3.C. Final Operations and Maintenance Manual, submitted following completion of startup testing. Three (3) hard draft copies and one (1) text-searchable digital copy. Ten (10) final hard copies and one (1) text-searchable digital copy, within two (2) weeks of receiving City’s comments.

4.3.D. Technical Memorandums and meeting summaries

4.3.E. Written responses to issues that may arise during construction.

TASK 5 – LAND NEEDS AND PROPERTY ACQUISITION (OPTIONAL TASK FOR THE CALAVERAS SUBSTATION)

SFPUC will lead the effort as it relates to property acquisition, right-of-way (ROW) and real estate services (RES). SFPUC staff will conduct an evaluation of property requirements and an assessment of properties adjacent and near the Project area. Consultant is to provide technical support with respect to property rights required for the project as described herein:

This task includes all real estate pre-acquisition activities required to assist the SFPUC Right of Way staff necessary to allow construction of the proposed project. Pre-acquisition activities are

defined as activities that can occur in advance of the necessary environmental clearances required for the construction of the proposed project.

These types of activities will include but not be limited to identifying the activities requiring ROW coordination for each project component; review of existing deeds, leases and easements; review of documents related to the acquisition of ROW and/or property necessary for the project; coordinate with project manager to identify ROW needs; conduct field observations; coordinating with property owners and local jurisdictions; preparing ROW data sheets.

- Consultant shall review existing plans and descriptions, mapping, deeds, title reports, easements, leases and other documents related to the acquisition of properties (title and easements) along the project alignment.
- Consultant shall coordinate with SFPUC project manager to determine the type of ROW and acquisition services required, timing, and whether there are reasonable alternatives.
- Consultant shall conduct a site reconnaissance at properties requiring real estate acquisition services. Field observations shall note condition of existing ROW, and identify opportunities and constraints to securing ROW.
- Consultant shall assist SFPUC staff and coordinate with property owners and identify property owner concerns and needs. Consultant shall develop an approach for coordinating with property owners and jurisdictions that own more than one parcel that may be impacted by acquisition activities.
- Consultant shall assist Right of Way/RES in securing Permits to Enter to allow project manager to perform necessary surveying, geotechnical investigations and environmental assessments any other project related investigations required related to the design of the project.
- Consultant shall prepare ROW data sheets as requested by Right of Way staff.
- Consultant shall assist Right of Way in assessing the overall ROW needs for the proposed project including an estimate of the approximate level of effort, person hours required during high activity periods, gaps in staffing and approaches how to complete acquisitions within the project schedule constraints.
- Consultant shall provide as needed: Title reports for properties required to complete the project along with any related land surveys, preparation of plat maps and appraisal maps, preparation of legal descriptions, and any other work required to properly appraise the property rights required and to ultimately acquire those property rights.

The acquisition activities may only begin after receiving approval from the SFPUC. Right of Way activities include but are not limited to identification of feasible property, land surveys, preparation of appraisal maps and legal descriptions for the required property rights, fair market value appraisals, preparation of government code offers to purchase, presenting the government code offer to the property owners in person unless impractical, negotiations with property owners, and if required: securing rights of entry, preparation of resolution of necessity package, assist the San Francisco City Attorney with preparation and filing of condemnation documents, providing Relocation Assistance Services as necessary, and all other activities required to secure possession of property rights required to advertise the proposed project.

Task 5 Key Deliverables:

5.A. Draft and Final Technical Memorandum for proposed project describing the extent of the acquisition related activities required, critical analysis of the ROW issues, and recommendations how to secure the necessary ROW

5.B. Deliverables as itemized in the subtask scope, as needed.

1.4 General Obligations

This section applies in full when the the SFPUC assigns Consultant to provide “standard engineering design” (i.e., Consultant assumes lead designer role) and it applies as appropriate when SFPUC requires Consultant to contribute to SFPUC designs (i.e., SFPUC assumes lead designer role). All documents generated by the Consultant as part of the Project must be in conformance with SFPUC standards and formats. For example, specification sections shall be prepared in accordance with the Construction Specifications Institute (CSI) 2012 MasterFormat. All work shall conform to SFPUC Infrastructure Division Procedures. Consultant shall submit all deliverables, depending on their type, separately in draft and final document format. Final documents shall be inclusive of all comments and/or issues raised during the review of draft documents.

A City-led design team may perform a portion of the design work. The Consultant team member who has the lead designer role must coordinate with the City Design Manager and City design team to produce a coordinated package.

Drawings and 3D models must be in AutoCAD 2018, AutoCAD Civil 3D 2018, and Revit 2017. SFPUC will provide the title block. Specifications shall follow CSI 2012 or latest approved version. AutoCAD, Revit, and CSI versions may be updated during the course of the design and construction period.

If required based on the CEQA mitigation measures as spelled out in the Project’s planning phase documents, incorporate all applicable environmental mitigation requirements within the project boundaries in the design and construction contract documents (plans and specifications). Include as appropriate language to ensure construction contractor compliance with mitigation requirements contained in environmental review and permit documents.

Where interim submittals for review are called for at 35%, 65%, 95% and 100%, Consultant shall submit red-lined copy showing checker comments as proof of QA/QC adherence.

The following descriptions indicate the content of those interim design submittals to be presented to the SFPUC.

A. 35% Design

Based on the CER, the Consultant will produce a preliminary design progress set of construction contract documents (drawings and specification list). SFPUC will prepare, customize, and coordinate Division 0 and 1 specifications. Successful Consultant will provide input into the preparation of the Division 0 and 1 specifications.

Consultant shall prepare documents encompassing the following:

- Definition of the facility that sufficiently identifies all major elements required, and the verification of feasibility of the design; and a list of permit requirements;
 - Definition of construction contract packaging, if required;
 - Preliminary horizontal (plans) and vertical alignments (sections) of the elements being designed; excavation and excavation/shoring support methods; methods of groundwater control, handling, and treatment; identification of any road relocations and traffic control; utility search;
 - Summary of design approach, and identification of design issues; outline of specifications;
 - Draft operations strategy plan;
 - Drawings, in conformance with SFPUC standards, a preliminary construction schedule taking into account construction sequencing of major work elements; and a construction cost estimate ($\pm 30\%$ accuracy). The preliminary construction cost estimate will be used as a baseline estimate for monitoring design development impacts;
 - Preliminary drawing list and a specification list detailing the drawings and specification sections believed to be required in the 100% design package;
 - A draft equipment list and equipment data sheets shall also be provided;
 - Preliminary drawings, sketches and other information developed by the Consultant (Architect) for submission to the San Francisco Arts Commission for approval.
- Consultant
will prepare any presentation materials necessary, and will be the lead presenter(s) with SFPUC staff to the San Francisco Arts Commission;
- Constructability analysis based on the preliminary design contract documents;
 - Update Project Risk Matrix;
 - Technical information and other CEQA-related documents, needed for the project's environmental review per the direction of SFPUC's Bureau of Environmental Management. This effort may include meetings with BEM staff and their environmental consultant; and
 - Design drawings/specifications shall include at a minimum:
 - General site plan
 - Symbols, abbreviations, and standard legends
 - Process design criteria tabulation and process flow diagrams
 - Architectural plan and elevations
 - Civil site plans and typical civil details
 - Structural notes, plans, sections and details
 - Process mechanical plans, sections and details
 - Pipeline plans and profiles
 - Electrical plans, and single line diagrams
 - Process, instrumentation and control system diagrams.

Design elements will be frozen at the completion of the 35% design package. Only design refinements that do not impact schedule and budget will be addressed in subsequent design packages. Following completion of the 35% design package, any significant design changes that impact schedule and budget will go through the SFPUC change control/management procedure.

B. 65% Design

The 65% design documents shall address comments from the 35% design.

Documents shall encompass the following:

- Response to Comment Log documenting the 35% comments and corresponding response in the 65% Design;
- Integration of drawings and specifications with those produced by the City Design Team, including appropriate drawing numbers, match lines, and cross referencing on all drawings;
- Updated technical specifications; contract plans/drawings; and bid item descriptions including method of payment to integrate with SFPUC standard descriptions;
- Updated detailed construction cost estimates ($\pm 20\%$ accuracy) and construction schedule;
- Updated drawing list and a specification list detailing the drawings and specification sections believed to be required in the 100% design package;
- Updated operations strategy plan;
- The 35% draft equipment list and equipment data sheets shall also be updated to reflect the design refinements made in the 65% design package. Include a preliminary list of material and equipment to be pre-purchased;
- Drawings, sketches and other information, developed by the Consultant (Architect) for submission to the San Francisco Arts Commission for approval. Consultant will prepare any presentation materials necessary, and will be the lead presenter(s) with SFPUC staff to the San Francisco Arts Commission;
- Constructability analysis based on the 65% design contract documents;
- Technical information and other CEQA-related documents, needed for the project's environmental review per the direction of SFPUC's Bureau of Environmental Management. This effort may include meetings with BEM staff and their environmental consultant; and
- Design drawings/specifications shall include at a minimum:
 - General site plan;
 - Symbols, abbreviations, and standard legends;
 - Process design criteria tabulation and process flow diagrams;
 - Architectural plan and elevations;
 - Hydraulic profiles;
 - Demolition plans;
 - Civil grading, paving and drainage plans for site;
 - Civil yard piping plans;
 - Civil site plans and typical civil details;
 - Structural notes, plans, sections and details;
 - Process mechanical plans, sections and details;
 - Pipeline plans and profiles;
 - Electrical plans, and single line diagrams;
 - Process, instrumentation and control system diagrams; and
 - Typical instrumentation details

C. 95% Design

The 95% design documents shall address comments from the 65% design. Documents shall encompass the following:

- Response to Comment Log documenting the 65% comments and corresponding response in the 95% Design;
- Incorporation of design interfaces and coordination issues relevant to designs performed by the SFPUC;
- Updated detailed construction cost estimates ($\pm 10\%$ accuracy) and construction schedule based on the 95% design contract documents. The construction schedule should clearly identify the system shutdown and operational constraint windows to be imposed as part of the contract;
- All drawings and specification sections necessary for a biddable construction document shall be provided;
- Updated drawing list and a specification section listing of those drawings/sections that have been submitted;
- Final constructability analysis;
- Updated equipment list and equipment data sheets shall also be provided. Include a final list of material and equipment to be pre-purchased and/or require long lead times for procurement;
- Updated Project Risk Matrix
- Consultant shall incorporate all mitigation measures identified in the CEQA documents into the design documents; and
- Completion of construction documents and packages for integration with contract plans/drawings and specifications produced by the SFPUC Design Team. The package shall be ready for stamping and signatures by the Engineer of Record and for review by SFPUC contract preparation staff; and
- Prepare Operations and Maintenance Manual for new unit processes, systems, and facilities; Update existing Operations Manual

D. 100% Design

The 100% design documents shall address comments from the 95% design. The 100% design documents shall include a complete biddable construction document.

Documents shall include the following:

- Provide input to complete preparation of Division 1 of the project specifications, including, but not limited to, providing technical project requirements, schedule requirements and constraints, and environmental mitigation specifications.
- Response to Comment Log documenting the 95% comments and corresponding response in the 100% Design;
- Incorporation of final environmental mitigation measures;
- Finalized, stamped and signed plans and specifications inclusive of all comments generated by SFPUC contract preparation staff, reflecting SFPUC and Project Team comments on 95% design documents, and final QA/QC audit;
- The 100% construction package shall be stamped and signed by a Professional Engineer

licensed in the State of California. All structural drawings must be stamped and signed by a Structural Engineer (SE) licensed in the State of California;

- A detailed itemized final construction cost estimate ($\pm 10\%$ accuracy) for the construction;
- All final signed and wet stamped analysis results, design calculations, design report, geotechnical, hydraulic, survey and other reports submittals as described within the Scope of Services;
- BIM model;
- Final operations strategy plan;
- Necessary permit applications supporting documents to SFPUC for review and acceptance prior to sending to the appropriate agency as required;
- Submittals shall be compatible with the SFPUC standards to allow easy entry into the SFPUC Document Control System; and
- Final Design Report consisting of project files including all plans, reports, correspondence, calculations, and other documents pertaining to the design. A fully collated, organized, indexed set of copies shall be transferred to the SFPUC within twenty (20) working days of the 100% design completion, including copies of documents already passed to SFPUC during the assignment. All documents shall be fully checked and signed off in accordance with the Quality Assurance/Quality Control (QA/QC) procedures.

1.5 Community Benefits

See Section 5.2.11 of the RFP for Community Benefits Submittal Instructions and Appendix C of the RFP from SFPUC's Community Benefits Program Supporting Documents.

1) Terms and Conditions

The Contractor shall provide the CB Commitments detailed in its CB Submittal during the term of the Agreement. The representations, warranties, and other terms contained in the Contractor's CB Submittal will be the basis for a Community Benefit Plan, but are for the sole benefit of the parties hereto and shall not be construed as conferring any rights on any other persons or entities.

Providing community benefits is a deliverable, zero-dollar task. No hours or dollars should be allocated or included in Consultant's costs for the services under this Agreement in order to perform or deliver the voluntarily proposed CB Commitments. The Contractor shall fund the CB Commitments independently and such funding shall neither be tied to, nor dependent upon, SFPUC funds or sources of funding, receivable from SFPUC, including retention associated with this Agreement. This requirement of independent funding includes direct financial contributions and any funding related to the performance or delivery of the CB Commitments. The provision of CB Commitments does not entitle the Contractor to additional work beyond the services specified within the Agreement.

The Contractor shall commence performance of the CB Commitments promptly after issuance of the first Notice to Proceed (NTP) for this Agreement. CB Commitments performed as part of previous contracts or prior to the Contractor being awarded the Agreement cannot count towards the Consultant's CB Commitments for this Agreement. If the Contractor has established programs or plans that are consistent with the Community Benefits areas described in this RFP, Contractor may continue those programs as part of its CB Commitments and will be given credit for activities that are performed following the issuance of the first NTP by the SFPUC.

2) *Project Team*

Hala Titus shall serve as the Executive in Charge to manage the Contractor's CB Commitments and provide fiduciary oversight. The Executive in Charge shall ensure that the CB Commitments listed in the Community Benefits Summary Table below are delivered to the communities that they are intended to benefit in a transparent and accountable manner. The Executive in Charge shall work with the Community Benefits Coordinator, Tom Frisher, to organize, plan, track, measure, and report on Contractor's CB Commitments. The Executive in Charge is responsible for coordinating the senior management of Contractor's subconsultants to provide benefits to the community should such subconsultants choose to participate.

3) *Community Benefits Commitments*

Contractor shall provide \$96,000 in direct financial contributions, \$72,000 in volunteer hours, and \$19,500 in in-kind contributions. Contractor commits to a minimum contribution of \$187,500 over the term of this Agreement as stated in the Community Benefits Summary Table on the following page.

Community Benefits Summary Table

Community Benefit Priority Area	Description of Community Benefit Program Area or Partner	Expected Outcomes	Timetable & Duration	Direct Financial Contribution	(B) Volunteer Hours	(C) Volunteer Hourly Rate (rate is standardized and cannot be changed)	(D) Total Value of Volunteer Hours (B x C)	(E) In-Kind Contributions	(F) Total Contributions (A + D + E)
Workforce Development	Fellowship Program for STEM Teachers (Ignited or other program)	<ul style="list-style-type: none"> - Enhance teacher confidence and enthusiasm by providing opportunities for teachers to gain real-world experience learning from and working with professionals in STEM fields - Improve teacher efficacy and student academic performance - Increase student engagement and long-term career potential in STEM careers for youth from communities such as Sunol, Hayward, Fremont, Union City, and Newark 	4 fellowships during the contract period estimated to be a six-year term	\$64,000	0 hrs	\$150/hr	\$0	\$15,000	\$79,500
Education	Alameda County Resource Conservation District	<ul style="list-style-type: none"> - Improve opportunities to learn about the principles of the working landscape, conservation and enhancement, and the local agricultural heritage of Alameda County - Provide hands-on educational opportunities for school children on topics related to the Alameda Creek Watershed, the water system, and sustainable agriculture 	Throughout full contract period estimated to be a six-year term						
	Engineers Alliance for the Arts	<ul style="list-style-type: none"> - Inspire students to pursue careers in the structural engineering and technical professions, and gain an understanding of the importance of creativity and aesthetics by teaching engineering and architectural skills in local classrooms within Alameda County 		\$32,000	240 hrs	\$150/hr	\$36,000	\$2,000	\$70,000
	Sunol Glen Unified School District or other area schools	<ul style="list-style-type: none"> - Introduce K through 8th grade school students to STEM through hands-on learning activities and real-life examples 							
Environmental Justice Programs	Volunteer labor and materials to support disadvantaged communities	<ul style="list-style-type: none"> - Improve environmental or health conditions and promote environmental stewardship in disadvantaged communities through activities such as trash removal, tree planting, invasive plant removal, or education in the communities of Sunol, Hayward, Fremont, Union City, or Newark 	Throughout full contract period estimated to be a six-year term		240 hrs.	\$150/hr	\$36,000	\$2,000	\$38,000
TOTAL				\$96,000	480 hrs	\$150/hr.	\$72,000	\$19,500	\$187,500

4) *Accountability and Deliverables*

Contractors shall provide a description of the accountability methods to ensure that the proposed CB activities will be delivered in a transparent and accountable manner. To maximize transparency and accountability, a process must be proposed that will assist in independently verifying that such funds and resources were delivered to the intended beneficiaries.

Contractor must provide the following deliverables during performance of the Agreement:

a) *Community Benefits Plan and Timeline*

- Contractor shall develop a Community Benefits Plan within three (3) months of issuance of the first NTP. The Community Benefits Plan will provide details regarding community partnerships, expenditures, a schedule, and timelines related to the CB Submittal.
- Contractor is invited to meet once a year thereafter or as needed with the SFPUC External Affairs Community Benefits and Social Responsibility Manager during the term of the Agreement to discuss the work plan, timelines, partners, strategic delivery, scale, and performance necessary to ensure the commitments maximize collective resources and positive impact.

b) *Community Benefits Commitments and Reporting*

- Contractor shall deliver the proposed CB Commitments specified in the CB Submittal and the Community Benefits Plan. Any proposed changes to the CB Commitments as set forth herein shall be submitted in writing for review by the External Affairs Community Benefits and Social Responsibility Manager.
- Contractor shall submit biannual progress reports to the SFPUC External Affairs Community Benefits and Social Responsibility Manager, which detail the geographic scope of commitment, activities and outcomes, key metrics, and the total number of hours, dollars, etc. contributed to-date. Progress reports must be submitted on the last business day of the month following the close of 2nd and 4th business quarters. As part of the progress reports, Contractor also must submit documents to substantiate that the CB Commitments and any funds associated therewith were delivered to the communities they were intended to benefit. These reporting requirements may be adjusted over the duration of the program due to system improvements.
- Contractor shall also submit an annual report documenting the culmination of their CB Commitments, beneficiaries, and outcomes for the year.

5) *Statements of Understanding*

Contractor acknowledges that they agree with the following statements:

- All instructions for the CB Submittal have been followed.

- Any of the CB Commitments that the Consultant voluntarily commits to should directly benefit the communities, neighborhoods, and/or residents served by or impacted by the SFPUC.
- CB Commitments must support nonprofit, charitable, or related activities.
- CB Commitments shall not go to, nor benefit, any City department or employee.
- CB Commitments are separate from and in addition to any regulatory or legal requirements related to the Agreement.
- CB Commitments must be delivered at zero dollar cost to the SFPUC.
- The total commitment amount listed in the Community Benefits Summary Table in the final Agreement is considered binding.
- Only activities commenced after the first NTP for this Agreement is issued will count towards the fulfillment of Consultant's CB Commitments.
- Consultant commits to complying with SFPUC's reporting requirements.
- Consultant commits to the Terms and Conditions set forth in this section and in the Agreement.

Contractor shall provide all of the CB Commitments, consistent with all of the terms of Contractor's Community Benefits Proposal dated August 29, 2019, which is incorporated herein by this reference. Should there be any conflicts or discrepancies between the language in this section and the Contractor's Community Benefits Proposal, the terms of the language of this section shall prevail as Contractor and SFPUC's final mutual understanding and agreement. *All written Deliverables, including any copies, shall be submitted on recycled paper and printed on double-sided pages to the maximum extent possible.*

2. Services Provided by Attorneys. Any services to be provided by a law firm or attorney must be reviewed and approved in writing in advance by the City Attorney. No invoices for services provided by law firms or attorneys, including, without limitation, as subcontractors of Contractor, will be paid unless the provider received advance written approval from the City Attorney.

3. Reports. Contractor shall submit written reports as requested by the SFPUC. Format for the content of such reports shall be determined by the SFPUC. The timely submission of all reports is a necessary and material term and condition of this Agreement. The reports, including any copies, shall be submitted on recycled paper and printed on double-sided pages to the maximum extent possible.

4. Department Liaison. In performing the Services provided for in this Agreement, Contractor's liaison with the SFPUC will be Colin Patton.

5. Standard of Care for Design Professionals. Contractor acknowledges and agrees that Contractor shall perform its services under this Agreement in accordance with the professional standard of care applicable to professionals providing similar services for projects of similar type, size and complexity in the San Francisco Bay Area.

Appendix B Calculation of Charges

As part of Contractor's proposal dated August 29, 2019, Contractor submitted proposed billing rates, attached hereto as Appendix B-1, Fee Schedule, for the requested tasks identified in Appendix A, Scope of Services which are incorporated herein by this reference.

As provided in the Fee Schedule, the budget identified for tasks is an estimate, and the City reserves the right to modify the budget allocated, if applicable, to any task as more specific information concerning the task order scope becomes available.

No invoices for Services provided by law firms or attorneys, including, without limitation, as subcontractors of Contractor, will be paid unless the provider received advance written approval from the City Attorney.

1. Billing Rates. Contractor's billing rates and each and every staff classification as stated in Appendix C will be the billing rates for the listed individuals. The billing rate may not exceed the lowest rate charged to any other governmental entity except the City and County of San Francisco. Billing rates will be fixed for the first year of the contract and may be adjusted annually thereafter. The first adjustment may be made no earlier than the first anniversary of the effective start date as indicated in the original Notice of Contract Award letter. The amount of the adjustment is limited to a maximum of the CPI annual percentage change increase (San Francisco Bay Area for Urban Wage Earners and Clerical Workers) for the previous calendar year. No increase, including the annual CPI adjustment, is allowed to billing rates exceeding \$250 per hour, unless Project Manager and Bureau Manager authorize an increase to the rate in writing.

2. Personnel Changes. Any proposed changes to project personnel or staff classification as listed in Appendix C must be approved in advance of any work commencing on the project and in writing by the SFPUC Project Manager. These personnel changes may include but are not limited to:

- Proposed addition of new project personnel to perform requested services that are within the scope of the Agreement;
- Proposed change of staff classification for existing personnel; and/or
- Proposed replacement or substitution of any employee listed in Appendix B-1 due to termination, promotion or reclassification.

All proposed personnel must meet all qualification requirements established by the Agreement.

3. Effective Overhead and Profit Rate. The Effective Overhead and Profit Rate (EOPR) for PRO.0120 is 2.79. The EOPR or Individual Firm Overhead and Profit Rate will apply to the billing rate of all individuals not listed in Appendix B-1. The EOPR will also apply to all amendments to the Agreement. If a new subcontractor is added during the duration of the Agreement, the new individual firm multiplier can be no more than the EOPR.

4. Other Direct Costs (ODC). Direct reimbursable expenses (ODCs – Other Direct Costs) shall include actual direct costs (with no mark up) of expenses directly incurred in performing the work. All ODCs are subject to pre-approval in writing by the SFPUC Project Manager.

a. The following items will be eligible for reimbursement as ODCs:

- Task-specific out-of-town travel (“out-of-town” shall mean outside the nine Bay Area counties: San Francisco, Alameda, Marin, Santa Clara, Sonoma, Contra Costa, Napa, San Mateo, Solano). Out-of-town travel must be non-routine;
- Rental vehicle: traveler must select the most economical contractor and type of vehicle available and acquire any commercial rate or government discount available when the vehicle is rented;
- Personal vehicle use: Contractor will be paid per mile as established by the United State Internal Revenue Service and only for that portion of travel that is outside the nine Bay Area counties and non-routine. Should the travel begin or end on a normal workday, the Contractor shall subtract commuting mileage from total mileage to calculate reimbursable mileage. The Contractor shall submit to the City an approved mileage log with its monthly invoices;
- Project vehicle rental/lease cost, gasoline, tolls and parking. The project vehicle must be requested and pre-authorized by the SFPUC staff. The SFPUC will only reimburse the business portion of the vehicle use. Vehicle mileage log and expense report are required for consideration of reimbursement. Since auto insurance is already part of the contract, no additional insurance will be reimbursed. Commuting to Moccasin from Contractor’s temporary home is not eligible for reimbursement.
- Specialty printing (“specialty” as used herein shall mean large volume printing and color printing and requires prior written approval by SFPUC project staff and documentation of the written approval by the SFPUC must be included with the invoice);
- Specialty computer hardware and software (only with prior written approval by SFPUC project staff and documentation of the written approval by the SFPUC must be included with the invoice – all hardware and software will be the property of the City);
- Courier services that are project related and originated from the project site offices;
- Task related permit fees;
- Expedited courier services when requested by SFPUC staff; and
- Safety equipment.

b. Anything not listed above is not eligible for reimbursement. They include, but are not limited to:

- All other travel expenses such as parking, bridge tolls, public transit, vehicle mileage within the nine Bay Area Counties, travel from Contractor's home office to SFPUC facilities;
- Contractor personnel relocation costs;
- Any home or regional office labor charges or pass-throughs, including but not limited to, administrative and clerical personnel time;
- Personnel relocation and temporary assignment expenses;
- Entertainment expenses;
- Cell phones;
- Home office expenses;
- Telephone calls and faxes originating in the firm's home office, standard computer use charges, computer hardware or software computer hardware or software (other than the specialty hardware or software mentioned above), communication devices, and electronic equipment;
- Meal expenses which are not related to project-related business trips, including refreshments and working lunches with SFPUC staff;
- Equipment to be used by SFPUC staff; and
- Postage and courier services which are not requested by SFPUC staff.

5. Subcontractor make-up and documentation. Second-tier and pass-through subcontracting is prohibited. Additional subcontractors may be added to the contractor team after obtaining pre-authorization by the SFPUC Project Manager, Bureau/Division Manager and the Contract Monitoring Division (CMD).

6. Subcontractor Fees:

- Subject to the restrictions in this Section 4;
- Shall be subject to written pre-approval by the Contractor's liaison with the SFPUC;
- Subcontractor administration markup is limited to five percent (5%) of subcontractors' actual labor costs.

7. Retention. Five percent (5%) of each invoice payment will be withheld for each task order. When the work for the task order or defined critical milestones has been completed to the satisfaction of the SFPUC Project Manager and all work products have been received and approved by the SFPUC Project Manager, the Contractor may request that the retention be released. In lieu of money retention, an irrevocable letter of credit acceptable to the City will be accepted.

8. Invoice Requirements. As part of its contracting obligations, the Contractor is required to utilize the City's approved invoicing and time-keeping systems, as specified by the SFPUC project team, for the purposes for which they are intended. Contractor shall not bill the SFPUC

to use these systems. Contractor shall not charge SFPUC to send appropriate personnel to user training.

Contractor shall follow the invoicing and supporting documentation instructions as prescribed by the SFPUC.

Invoice Supporting Documentation:

All labor hours must be substantiated by timesheet summaries extracted from the Contractor's accounting system. Each timesheet summary shall include the staff person's name, company, dates of the days worked, and the number of hours worked each day.

Mileage ODCs must be accompanied by mileage logs providing the beginning and ending mileage to substantiate the variable portal-to-portal distance and local driving required while performing the work. All other ODCs must be substantiated with copies of original receipts including a brief description for each receipt memorializing the purpose.

CMD Form 7 "Progress Payment Form" must be included with each invoice to identify the participation and amount payable to the subcontractors.

CMD Form 9 "Payment Affidavit" must be submitted within ten (10) days of receiving payment for each invoice to document the subcontractor's payment by the prime contractor.

Appendix B-1 Fee Schedule

PUC.PRO.0120 - Engineering Services for Sunol Valley Water Treatment Plant Ozonation
Overhead and Profit Schedule Submitted by CDM Smith Inc.

OVERHEAD AND PROFIT SCHEDULE

Task	Task Summary	Staff Classification/Role	Name of Proposed Staff Person	Firm	Estimated Number of Hours	Base Hourly Rate (\$/hour)	Base Labor Cost (\$) = [F]*[G]	Firm Overhead and Profit Rate (OPR, or "Multiplier") - one per firm = [G]*[I]	Billing Rate (\$/hour) = [G]*[J]	Actual Labor Cost (\$) = [F]*[J]		
[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]		
1	Management (Excluding Optional Task 1.2)	Principal In Charge	Fisher, Tom R	CDM Smith	402	\$111.44	\$44,800	3.02	\$250.00	\$100,500		
		Project Manager	Molina, Servando	CDM Smith	1,723	\$102.01	\$175,780	3.02	\$250.00	\$430,750		
		Design Production Manager	Almanzar-Michel, Leonel Ivan	CDM Smith	850	\$85.11	\$80,809	3.02	\$250.00	\$237,379		
		Project Scheduler	Joehno, Jeremiah J	CDM Smith	256	\$52.02	\$13,310	3.02	\$157.11	\$40,219		
		BIM Coordinator	Burkman, Matt D	CDM Smith	28	\$96.37	\$1,858	3.02	\$290.44	\$5,812		
		Project Delivery Assistant	Aala, Vanessa F	CDM Smith	1,800	\$27.83	\$50,091	3.02	\$84.04	\$151,274		
		Outreach Support	Tjerno, Juan J	CDM Smith	120	\$48.15	\$5,778	3.02	\$145.42	\$17,450		
		Project Controls	Higuchi, Michael J	CDM Smith	204	\$96.56	\$19,699	3.02	\$250.00	\$51,000		
		Project Financials	Wood, Christine M	CDM Smith	160	\$54.46	\$8,712	3.02	\$164.45	\$26,311		
		Ozonation Process Task Leader	Zeller, Michael A	CDM Smith	100	\$105.34	\$10,534	3.02	\$250.00	\$25,000		
		Process Mechanical Lead	Lal, Hol Yi (Mandy)	CDM Smith	250	\$58.35	\$14,587	3.02	\$178.21	\$44,052		
		Process Engineer	Punuru, Nikhila	CDM Smith	200	\$42.08	\$8,419	3.02	\$127.13	\$25,425		
		CADD	Ruah, Mark A	CDM Smith	12	\$45.42	\$545	3.02	\$137.17	\$1,646		
		Civil Lead	Brick, William D	CDM Smith	100	\$81.75	\$8,175	3.02	\$246.88	\$24,688		
		Civil Engineer	Ma, Michelle M	CDM Smith	86	\$59.84	\$5,145	3.02	\$180.73	\$17,350		
		Civil Engineer	Goh, Arthur Tok Wei	CDM Smith	48	\$55.58	\$2,671	3.02	\$161.74	\$7,784		
		Civil Modeler	Rush, Marc A	CDM Smith	15	\$45.42	\$672	3.02	\$137.17	\$2,165		
		Structural Lead	Chen, Chen-Show	CDM Smith	45	\$76.85	\$3,461	3.02	\$231.61	\$11,117		
		Mechanical Lead	Braham, Sald Y	CDM Smith	48	\$73.28	\$3,518	3.02	\$221.31	\$10,823		
		Electrical Lead	Fransen, Bradley J	CDM Smith	48	\$75.94	\$3,645	3.02	\$229.34	\$11,006		
		I&C Lead	Mariano, John Lawrence J	CDM Smith	48	\$72.24	\$3,468	3.02	\$218.17	\$10,472		
										\$0.00		
				Peer Reviewer	Joe Huang	AECOM Technical Services, Inc.	358	\$63.59	\$22,763	2.27	\$231.56	\$85,213
				Principal Civil Engineer	Kenneth Lile	AGS, Inc.	18	\$94.00	\$1,692	2.86	\$250.00	\$4,500
				Principal Civil Engineer	Erik Scheffer	AGS, Inc.	69	\$71.50	\$4,935	2.66	\$180.18	\$11,411
				Senior Civil Engineer	Stefan Hofmeister	AGS, Inc.	37	\$85.00	\$3,105	2.66	\$172.50	\$6,387
										\$0.00		
				Principal Engineer	Joe Hill	Joe Hill Consulting Engineers	200	\$80.07	\$16,014	2.55	\$204.18	\$40,836
										\$0.00		
				Principal Engineer - Proj. Manager	Darby Howard	JDH Corcoran Consultants, Inc.	16	\$80.00	\$1,280	2.75	\$220.00	\$3,520
				Principal Engineer - Asst. Proj. Manager	Mohammed Ali	JDH Corcoran Consultants, Inc.	24	\$77.70	\$1,865	2.75	\$213.64	\$5,128
				Operation Manager - Project Coordinator	Sean Caray	JDH Corcoran Consultants, Inc.	40	\$56.30	\$2,252	2.75	\$154.63	\$8,180
				Principal	M. Stevens	Stevens & Associates	20	\$85.24	\$1,704.80	2.85	\$225.89	\$4,518
				Manager	P. Harris	Stevens & Associates	89	\$98.94	\$8,805.66	2.85	\$182.89	\$10,981
				CADD Adm.	L. Khozan	Stevens & Associates	40	\$35.85	\$1,434.00	2.65	\$95.00	\$3,900
				Senior Principal Geotechnical Engineer	Bahram Khamehnezhad	AGS Inc.	18	\$94.00	\$1,692	2.70	\$250.00	\$4,500
				Principal Geotechnical Engineer	Karren Ghazali	AGS Inc.	18	\$78.30	\$1,411	2.70	\$211.95	\$3,815
				Environmental Project Manager	Christopher Kaci	AGS Inc.	6	\$43.00	\$258	2.70	\$116.10	\$697
		TASK 1 TOTAL					7,582		\$527,638			\$1,443,323
				Principal In Charge	Fisher, Tom R	CDM Smith	160	\$111.44	\$18,723	3.02	\$250.00	\$42,000
				Project Manager	Molina, Servando	CDM Smith	1,001	\$102.01	\$102,151	3.02	\$250.00	\$250,350
				Design Production Manager	Almanzar-Michel, Leonel Ivan	CDM Smith	916	\$85.11	\$77,957	3.02	\$250.00	\$229,000
				BIM Coordinator	Burkman, Matt D	CDM Smith	500	\$66.37	\$33,185	3.02	\$200.44	\$100,219
				Spec Writer	Smith, Rita A	CDM Smith	799	\$47.24	\$37,070	3.02	\$142.67	\$99,871
		Project Delivery Assistant	Aala, Vanessa F	CDM Smith	408	\$27.83	\$11,354	3.02	\$84.04	\$34,289		
		Outreach Support	Tjerno, Juan J	CDM Smith	32	\$48.15	\$1,541	3.02	\$145.42	\$4,653		
		QA/QC	Fosse, Robert E	CDM Smith	120	\$66.69	\$8,003	3.02	\$250.00	\$30,000		
		QA/QC	Stott, Ian M	CDM Smith	120	\$111.89	\$13,427	3.02	\$250.00	\$30,000		
		Technical Advisor	Lindstedt, Gregory L	CDM Smith	120	\$99.39	\$11,927	3.02	\$250.00	\$30,000		
		QA/QC Chair	O'Neil, William	CDM Smith	120	\$95.27	\$11,432	3.02	\$250.00	\$30,000		
		Constructability	Lazewski, Nete K	CDM Smith	120	\$96.44	\$10,372	3.02	\$250.00	\$30,000		

Ozone System Specialist	Schulz, Christopher R (Chris)	CDM Smith	120	\$102.40	\$12,289	3.02	\$250.00	\$30,000
Ozonation Process Task Leader	Zafar, Michael A	CDM Smith	1,898	\$105.34	\$199,930	3.02	\$250.00	\$474,500
Process Mechanical Lead	Lai, Hal Yi (Mandy)	CDM Smith	3,030	\$56.35	\$176,818	3.02	\$176.21	\$532,990
Process Engineer	Chang, Eun Chu (Evelyn)	CDM Smith	744	\$63.48	\$47,227	3.02	\$181.70	\$142,826
Process Engineer	Pururu, Nijala	CDM Smith	3,036	\$42.09	\$127,900	3.02	\$127.13	\$386,258
CADD	Ruth, Mark A	CDM Smith	2,125	\$45.43	\$96,517	3.02	\$137.17	\$291,487
Water Quality & Treat.	Hooper, Jennifer L	CDM Smith	302	\$59.97	\$17,992	3.02	\$181.12	\$54,334
Civil Lead	Brick, William D	CDM Smith	192	\$81.75	\$15,898	3.02	\$248.88	\$47,401
Civil Engineer	Shumaker, Stephen F	CDM Smith	120	\$84.07	\$10,088	3.02	\$250.00	\$30,000
Civil Engineer	Ma, Michelle M	CDM Smith	712	\$56.84	\$40,608	3.02	\$180.73	\$128,677
Civil Engineer	Goh, Arthur Tok-Wai	CDM Smith	912	\$53.58	\$48,843	3.02	\$161.74	\$147,511
Civil Engineer	Landman, Sam E	CDM Smith	1,273	\$36.70	\$46,719	3.02	\$110.82	\$141,879
CADD	Ruth, Mark A	CDM Smith	1,142	\$45.42	\$51,870	3.02	\$137.17	\$156,846
Hydraulics Lead	Kraus, Curtis L	CDM Smith	226	\$87.42	\$14,833	3.02	\$203.81	\$44,795
Structural Lead	Chen, Chuen-Show	CDM Smith	857	\$76.89	\$50,004	3.02	\$231.61	\$151,011
Structural Engineer	Hahn, Alan H	CDM Smith	980	\$53.04	\$50,922	3.02	\$180.19	\$153,780
Structural Engineer	Mitchell, Jennifer S	CDM Smith	1,068	\$44.32	\$47,334	3.02	\$133.65	\$142,949
CADD	Johnson, Audrey S	CDM Smith	770	\$48.76	\$38,007	3.02	\$141.22	\$108,740
Mechanical Lead	Ibrahim, Said Y	CDM Smith	813	\$73.28	\$60,900	3.02	\$221.31	\$202,057
Mechanical Engineer	Ricketts, April	CDM Smith	617	\$56.59	\$36,153	3.02	\$176.95	\$106,181
Mechanical Engineer	Pyshnov, Erik	CDM Smith	824	\$39.77	\$30,777	3.02	\$66.97	\$67,747
Electrical Lead	Franklin, Bradley J	CDM Smith	829	\$75.94	\$47,766	3.02	\$229.34	\$144,233
Electrical Engineer	Mahia, Sajid K	CDM Smith	873	\$61.90	\$41,659	3.02	\$185.94	\$125,811
Electrical Engineer	Adams, Todd C	CDM Smith	698	\$45.20	\$31,507	3.02	\$138.52	\$85,424
CADD	Varechati, Sahanat	CDM Smith	1,795	\$32.24	\$57,868	3.02	\$97.36	\$174,781
I&C Lead	Mariano, John Lawrence J	CDM Smith	1,042	\$72.34	\$75,276	3.02	\$216.17	\$227,333
I&C Engineer	April, Gilles	CDM Smith	528	\$78.24	\$41,815	3.02	\$239.29	\$126,584
I&C Engineer	Carbo, Laura D	CDM Smith	1,472	\$41.95	\$61,749	3.02	\$126.69	\$186,483
CADD	Morton, Jonathan K	CDM Smith	1,275	\$32.24	\$41,104	3.02	\$97.36	\$124,134
Cost Estimator	Sudniker, Todd J	CDM Smith	909	\$66.42	\$62,456	3.02	\$208.65	\$186,889
Geotechnical Engineer	Foote, Robert E	CDM Smith	120	\$86.88	\$10,406	3.02	\$250.00	\$30,000
Architect	Amon, Lee C	CDM Smith	186	\$61.21	\$11,508	3.02	\$184.88	\$34,753
Peer Reviewer	Joe Huang	AECOM Technical Services, Inc.	420	\$83.59	\$35,110	2.77	\$231.56	\$97,254
Facilities Integration	Simon Brees	AECOM Technical Services, Inc.	956	\$68.82	\$64,909	2.77	\$246.02	\$235,108
CFD	Ryan Edson	AECOM Technical Services, Inc.	800	\$71.18	\$56,947	2.77	\$187.18	\$157,742
Staff Engineer	Tom Strout	AECOM Technical Services, Inc.	240	\$46.98	\$9,806	2.77	\$113.18	\$27,164
Environmental - CEQA/Permitting	Kathy Bayer	AECOM Technical Services, Inc.	340	\$89.29	\$30,357	2.77	\$247.32	\$84,099
Environmental - Cultural Resources	Kel Kubal	AECOM Technical Services, Inc.	52	\$45.57	\$2,366	2.77	\$126.22	\$6,563
Environmental - Biological Resources	Matthew Galatheim	AECOM Technical Services, Inc.	106	\$57.79	\$6,242	2.77	\$180.06	\$17,239
QA/QC	Jonathan Prasadee	AECOM Technical Services, Inc.	130	\$88.29	\$11,607	2.77	\$247.32	\$32,152
QA/QC	Alessandro Franchi	AECOM Technical Services, Inc.	370	\$88.29	\$33,336	2.77	\$247.32	\$91,509
Safety Representative	Sharon Couch	AECOM Technical Services, Inc.	40	\$62.83	\$2,517	2.77	\$174.32	\$6,973
Principal Civil Engineer	Kenneth Lira, PE, LS, LEED	AGS Inc.	100	\$ 94.00	\$ 9,400	2.70	\$250.00	\$25,000
Principal Civil Engineer	Erik Schaller, PE, OSD	AGS Inc.	335	\$ 71.50	\$23,953	2.70	\$193.85	\$64,872
Senior Civil Engineer	S Stefan Hoffmeister, PE	AGS Inc.	470	\$ 65.00	\$30,550	2.70	\$175.50	\$82,485
Project Civil Engineer	Pavel F. Guevara, PE	AGS Inc.	420	\$ 45.50	\$19,110	2.70	\$122.85	\$51,587
Staff Civil Engineer	Michael Ngo, EIT	AGS Inc.	340	\$ 35.50	\$12,070	2.70	\$95.85	\$32,589
Foreman	Yogendra Singh	EXARO Technologies	20	\$58.64	\$1,172	2.70	\$188.33	\$3,187
Technician	Hector Ruiz	EXARO Technologies	20	\$66.59	\$1,322	2.70	\$182.28	\$3,045
Project Manager	Mario Lopez	EXARO Technologies	10	\$67.00	\$670	2.70	\$180.90	\$1,809
Project Lead	Jose Dominguez	EXARO Technologies	4	\$67.00	\$268	2.70	\$180.90	\$724
Senior Operations Specialist	Leland Fong	Joe Hill Consulting Engineers	260	\$89.98	\$23,396	2.55	\$279.43	\$59,843
Startup & Testing Engineer	Eric Koelhof	Joe Hill Consulting Engineers	135	\$70.40	\$9,504	2.55	\$179.52	\$24,235
Senior Electrical Specialist	Justo Delos Santos	Joe Hill Consulting Engineers	135	\$62.30	\$8,438	2.55	\$159.38	\$21,519
Senior Engineer	Christine Ko	Joe Hill Consulting Engineers	40	\$63.45	\$2,538	2.55	\$161.80	\$6,472
Principal Engineer	Joe Hill	Joe Hill Consulting Engineers	10	\$80.07	\$801	2.55	\$204.18	\$2,042
Noise and Vibration Engineer	Keith Kintbering	VACC, Inc	254	\$36.00	\$9,231	2.65	\$95.55	\$24,443
Noise and Vibration Engineer	Matt Snedden	VACC, Inc	112	\$50.00	\$5,600	2.65	\$132.50	\$14,840
Noise and Vibration Lead Engineer	Ahmad Bayet	VACC, Inc	32	\$83.82	\$2,657	2.65	\$220.00	\$7,040
Corrosion Design Specialist	Tom Herlin	JDH Corrosion Consultants, Inc.	72	\$54.40	\$3,917	2.75	\$149.60	\$10,771
Project Engineer	Jared Whalen	JDH Corrosion Consultants, Inc.	100	\$47.40	\$4,740	2.75	\$130.54	\$13,055
Cathodic Protection Designer	Will Howard	JDH Corrosion Consultants, Inc.	60	\$14.30	\$2,858	2.75	\$131.81	\$7,310
Corrosion Technician	Brandon Hurley	JDH Corrosion Consultants, Inc.	24	\$46.60	\$1,118	2.75	\$128.15	\$3,076
Principal/Lead Geotech Engr	Neel Neelekantan	Geotechnical Consultants, Inc.	120	\$110.00	\$13,200	2.5	\$250.00	\$30,000
Seismic Specialist	Shahar Vardim	Geotechnical Consultants, Inc.	108	\$150.00	\$16,200	2.5	\$250.00	\$27,000
Associate/Senior Geotech Engr	Joseph Sabold	Geotechnical Consultants, Inc.	182	\$87.00	\$16,704	2.5	\$217.50	\$41,700

Associate/Senior Geotech Engr	Mark Petersen	Geotechnical Consultants, Inc	14	\$95.00	\$1,368	2.5	\$237.50	\$3,420
Project Engr	Kevin Khan	Geotechnical Consultants, Inc	48	\$52.19	\$2,505	2.5	\$130.48	\$6,263
Senior Engr	Dustin Agnew	Geotechnical Consultants, Inc	96	\$59.90	\$5,750	2.5	\$149.75	\$14,376
Lead Geologist/Hydrogeologist	James Thurber	Geotechnical Consultants, Inc	20	\$87.94	\$2,353	2.5	\$219.88	\$6,351
Senior Geologist	Aime Patterson	Geotechnical Consultants, Inc	29	\$59.79	\$1,729	2.5	\$148.41	\$4,364
Staff Engineer	Aryan Noroozi	Geotechnical Consultants, Inc	24	\$40.00	\$960	2.5	\$100.00	\$2,400
Staff Geologist	Emma Griffin	Geotechnical Consultants, Inc	10	\$31.52	\$303	2.5	\$78.80	\$756
Staff Geologist	Jennifer Knipper	Geotechnical Consultants, Inc	10	\$33.00	\$317	2.5	\$82.50	\$792
Project Controls	Jaya Sestry	Geotechnical Consultants, Inc	24	\$48.86	\$1,168	2.5	\$121.65	\$2,920
Project Assistant	Amelia Walsh	Geotechnical Consultants, Inc	24	\$22.00	\$528	2.5	\$55.00	\$1,320
Project Engineer	Glenn Hunter	Process Applications, Inc.	80	\$70.94	\$5,675	2.90	\$205.73	\$16,458
Principal	M. Stevens	Stevens & Associates	180	\$85.24	\$15,343.20	2.65	\$225.89	\$40,659
Manager	P. Harris	Stevens & Associates	350	\$58.94	\$24,818.40	2.65	\$182.69	\$65,769
Design CADD	N. Postamekovich	Stevens & Associates	540	\$44.12	\$23,824.80	2.65	\$118.92	\$63,196
Landscape Architect	G. Dwornik	Stevens & Associates	260	\$48.12	\$12,511.20	2.65	\$127.52	\$33,155
Design Lead	W. Vernon	Stevens & Associates	190	\$61.80	\$11,724.00	2.65	\$163.77	\$29,479
Senior Principal Geotechnical Engineer	Bahram Khramanepour	AGS Inc.	2	\$94.00	\$188	2.70	\$250.00	\$500
Principal Geotechnical Engineer	Kamran Ghislah	AGS Inc.	22	\$78.50	\$1,727	2.70	\$211.35	\$4,653
Senior Staff Geologist	Joseph Farrow	AGS Inc.	118	\$43.00	\$5,068	2.70	\$118.10	\$13,758
Staff Geologist	Lauren Proberg	AGS Inc.	283	\$33.86	\$9,536	2.70	\$90.80	\$23,837
Certified Engineering Geologist	Richard Hartan	AGS Inc.	128	\$75.00	\$9,563	2.70	\$202.50	\$25,819
Environmental Project Manager	Christopher Kadl	AGS Inc.	141	\$43.00	\$6,063	2.70	\$116.10	\$16,376
Senior Environmental Engineer	Sami Nisabab	AGS Inc.	12	\$97.50	\$1,050	2.70	\$236.25	\$2,835
Senior Land Surveyor	Alex White	LEE Incorporated	100	\$80.00	\$8,000	2.50	\$200.00	\$20,000
Senior Land Surveyor	Ryan Mix	LEE Incorporated	100	\$80.00	\$8,000	2.50	\$200.00	\$20,000
CAD Technician	Steve Cobbleck	LEE Incorporated	100	\$70.00	\$7,000	2.50	\$175.00	\$17,500
TASK 2 TOTAL			44,812		\$2,894,198			\$7,658,438
QA/QC	Fosse, Robert E	CDM Smith	80	\$96.84	\$8,333	3.02	\$250.00	\$20,000
QA/QC	Stott, Ian M	CDM Smith	150	\$111.99	\$16,799	3.02	\$250.00	\$37,500
Task Leader	Dennis Crona	AECOM Technical Services, Inc.	1,794	\$89.29	\$160,179	2.77	\$247.32	\$443,695
Deputy Task Leader	Dean Goward	AECOM Technical Services, Inc.	1,988	\$89.29	\$177,174	2.77	\$247.32	\$488,729
QA/QC	Dave Staley	AECOM Technical Services, Inc.	264	\$89.29	\$23,571	2.77	\$247.32	\$65,283
Senior Electrical Engineer	Ivan Welander	AECOM Technical Services, Inc.	2,498	\$54.64	\$136,383	2.77	\$151.38	\$377,787
Senior Electrical Engineer	Ryan Auli	AECOM Technical Services, Inc.	200	\$90.61	\$18,122	2.77	\$223.28	\$44,657
Electrical Engineer	Raymond Huang	AECOM Technical Services, Inc.	712	\$44.32	\$31,556	2.77	\$122.77	\$87,411
Protection & Control Engineer	Charles Larkin	AECOM Technical Services, Inc.	200	\$63.59	\$12,719	2.77	\$178.15	\$35,206
Senior Electrical Engineer	Rajeev Vaidya	AECOM Technical Services, Inc.	712	\$67.04	\$47,800	2.77	\$183.87	\$130,407
Principal Structural Engineer	Savas Kalkanaya	AECOM Technical Services, Inc.	651	\$89.29	\$58,190	2.77	\$247.32	\$138,274
Structural Engineer	Kathleen Graham	AECOM Technical Services, Inc.	1,094	\$44.98	\$49,208	2.77	\$124.59	\$138,307
SCADA / PLC Lead	Greg Paulson	AECOM Technical Services, Inc.	122	\$78.62	\$9,614	2.77	\$218.32	\$28,633
SCADA Engineer	Mike Adams	AECOM Technical Services, Inc.	122	\$63.58	\$7,758	2.77	\$178.15	\$21,490
Senior Civil Engineer	Tai-Ling Pang	AECOM Technical Services, Inc.	455	\$76.47	\$34,793	2.77	\$211.81	\$98,374
Civil Engineer	Jari Shaw	AECOM Technical Services, Inc.	381	\$37.78	\$14,384	2.77	\$108.62	\$29,872
Designer/CAD	Kevin Lee	AECOM Technical Services, Inc.	188	\$44.67	\$8,309	2.77	\$123.74	\$23,015
Project Director	Bob Turley	AECOM Technical Services, Inc.	400	\$99.28	\$35,714	2.77	\$247.32	\$98,928
Foreman	Yogendra Singh	EXARO Technologies	20	\$58.94	\$1,173	2.70	\$158.33	\$3,167
Technician	Hector Ruiz	EXARO Technologies	20	\$58.98	\$1,178	2.70	\$152.25	\$3,045
Project Manager	Mario Lopez	EXARO Technologies	10	\$67.00	\$670	2.70	\$180.60	\$1,809
Project Lead	Jose Dominguez	EXARO Technologies	4	\$67.00	\$268	2.70	\$180.90	\$724
Principal/Lead Geotech Engr	Neel Neelakantan	Geotechnical Consultants, Inc	120	\$110.00	\$13,200	2.5	\$250.00	\$30,000
Senior Specialist	Shahar Vaidya	Geotechnical Consultants, Inc	80	\$150.00	\$12,000	2.5	\$350.00	\$27,500
Associate/Senior Geotech Engr	Joseph Seibold	Geotechnical Consultants, Inc	180	\$87.00	\$15,660	2.5	\$217.50	\$34,950
Project Engr	Mark Petersen	Geotechnical Consultants, Inc	24	\$95.00	\$2,280	2.5	\$237.50	\$5,700
Senior Engr	Kevin Khan	Geotechnical Consultants, Inc	80	\$52.19	\$4,175	2.5	\$130.48	\$10,458
Senior Engr	Dustin Agnew	Geotechnical Consultants, Inc	90	\$59.90	\$5,391	2.5	\$149.75	\$13,478
Lead Geologist/Hydrogeologist	James Thurber	Geotechnical Consultants, Inc	48	\$87.94	\$4,221	2.5	\$219.88	\$10,553
Senior Geologist	Aime Patterson	Geotechnical Consultants, Inc	24	\$59.79	\$1,435	2.5	\$148.41	\$3,587
Staff Engineer	Aryan Noroozi	Geotechnical Consultants, Inc	24	\$40.00	\$960	2.5	\$100.00	\$2,400
Staff Geologist	Emma Griffin	Geotechnical Consultants, Inc	8	\$31.52	\$252	2.5	\$78.80	\$630
Staff Geologist	Jennifer Knipper	Geotechnical Consultants, Inc	8	\$33.00	\$264	2.5	\$82.50	\$660
Project Controls	Jaya Sestry	Geotechnical Consultants, Inc	24	\$48.86	\$1,168	2.5	\$121.65	\$2,920
Project Assistant	Amelia Walsh	Geotechnical Consultants, Inc	24	\$22.00	\$528	2.5	\$55.00	\$1,320
Principal	M. Stevens	Stevens & Associates	10	\$85.24	\$852.40	2.65	\$225.89	\$2,259
Design CADD	N. Postamekovich	Stevens & Associates	60	\$44.12	\$2,647.20	2.65	\$118.92	\$7,019
Landscape Architect	G. Dwornik	Stevens & Associates	40	\$48.12	\$1,924.80	2.65	\$127.52	\$5,101
Design Lead	W. Vernon	Stevens & Associates	120	\$61.80	\$7,416.00	2.65	\$163.77	\$18,652

Senior Principal Geotechnical Engineer	Bahram Khameshpour	AGS Inc.	6	\$94,000	\$750	2.70	\$250.00	\$2,000
Principal Geotechnical Engineer	Kamran Ghassal	AGS Inc.	24	\$78,500	\$1,884	2.70	\$211.99	\$5,087
Senior Staff Geologist	Joseph Farrow	AGS Inc.	112	\$43,000	\$4,818	2.70	\$116.10	\$13,003
Staff Geologist	Leuren Froberg	AGS Inc.	120	\$33,660	\$4,039	2.70	\$90.88	\$10,906
Certified Engineering Geologist	Richard Hagan	AGS Inc.	31	\$75,000	\$2,400	2.70	\$292.59	\$8,485
Environmental Project Manager	Christopher Kadi	AGS Inc.	96	\$43,000	\$4,128	2.70	\$116.10	\$11,146
Senior Environmental Engineer	Sami Malsab	AGS Inc.	19	\$87,500	\$1,680	2.70	\$236.25	\$4,538
Senior Land Surveyor	Alex White	LEE Incorporated	100	\$80,000	\$8,000	2.50	\$200.00	\$20,000
Senior Land Surveyor	Ryan Miz	LEE Incorporated	100	\$80,000	\$8,000	2.50	\$200.00	\$20,000
CAD Technician	Steve Cobareddick	LEE Incorporated	100	\$70,000	\$7,000	2.50	\$175.00	\$17,500
TASK 3 TOTAL			13,602		\$956,733			\$2,861,754
PROJECT TOTAL			65,996		4,188,561			11,704,518

Other Direct Costs (ODCs)

Description	Cost
1 Travel expenses outside Bay Area (AECOM)	\$22,000
2 Travel expenses outside Bay Area (VACC, Inc)	\$300
3 Travel expenses outside Bay Area (PAI)	\$3,000
4 Travel expenses within Bay Area (AGS Inc)	\$3,000
5 Reprographics and Mail (AECOM)	\$8,000
6 Reprographics and Mail (AGS Inc, Civil)	\$300
7 Soil Resistivity Testing (AECOM)	\$15,000
8 Travel Outside Bay Area (CDM Smith)	\$61,750
9 Field equipment (example only)	\$1,200
10 Laboratory tests (CDM Smith)	\$50,000
11 Materials (EXARO Technologies)	\$280
12 Disposal (EXARO Technologies)	\$35
13 Vacuum Excavation Truck (EXARO Technologies)	\$1,864
14 Subsistence (EXARO Technologies)	\$400
15 Pickup Truck (EXARO Technologies)	\$118
16 Laboratory tests (chemical analysis of soil samples) (JDH Corrosion)	\$2,000
17 Geotechnical Drilling (Drill Rig, Support Truck, materials, sample sleeves) (GTC)	\$40,000
18 Geotechnical Laboratory Testing (GTC)	\$10,000
19 Utility Location Services (GTC)	\$3,000
20 ACWD and other permits, tests, miscellaneous (GTC)	\$2,000
21 Travel expenses within Bay Area (Stevens + Associates)	\$3,000
22 Reprographics and Mail (Stevens + Associates)	\$3,000
23 Specialty computer hardware or software (example only) Revit (Stevens + Associates)	\$3,000
24 Software Upgrade (Stevens + Associates)	\$6,000
25 Permits (Zone 7) (AGS Inc, HAZ)	\$530
26 Environmental testing and disposal (AGS Inc, HAZ)	\$31,505
TOTAL OTHER DIRECT COSTS	\$271,683

Effective Overhead and Profit Rate (EOPR, or Effective Project Multiplier) **2.79**
 (= Total Actual Labor Cost / Total Base Labor Cost)
 Maximum Allowable Effective Project Multiplier = 3.20

TOTAL PROJECT COST BREAKDOWN

Total Actual Labor Cost: **\$11,704,518**

Optional Tasks 1, 2, 4, and 5: **\$2,800,000**

Total Other Direct Costs (ODCs): **\$271,683**

Markup on Subconsultant Labor Cost: **\$224,340**

(Maximum Allowable: 5% of subconsultant labor costs)

TOTAL PROJECT COST (NOT TO EXCEED \$15,000,000) \$14,999,941