

**AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES**

This Agreement is made and entered into effective _____, by and between the CITY OF FRESNO, a California municipal corporation (City), and Carollo Engineers, Inc., a Delaware corporation (Consultant).

RECITALS

WHEREAS, the City desires to obtain professional Project Management and Engineering Design services for the Sidestream Treatment System at the Fresno-Clovis Regional Wastewater Reclamation Facility (Project); and

WHEREAS, the Consultant is engaged in the business of furnishing services as a Civil Engineering consultant and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, the Consultant acknowledges that this Agreement is subject to the requirements of Fresno Municipal Code Section 4-107 and Administrative Order No. 6-19; and

WHEREAS, this Agreement will be administered for the City by its Director of Public Utilities (Director) or designee.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and promises hereinafter contained to be kept and performed by the respective parties, it is mutually agreed as follows:

1. Scope of Services. The Consultant shall perform to the satisfaction of the City the services described in **Exhibit A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**.

2. Term of Agreement and Time for Performance. This Agreement shall be effective from the date first set forth above and shall continue in full force and effect through the earlier of complete rendition of the services hereunder or December 31, 2026, subject to any earlier termination in accordance with this Agreement. The services of the Consultant as described in **Exhibit A** are to commence upon the City's issuance of a written "Notice to Proceed." Work shall be undertaken and completed in a sequence assuring expeditious completion, but in any event, all such services shall be completed within 1669 consecutive calendar days from such authorization to proceed.

3. Compensation.

(a) The Consultant's sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee not to exceed Four Million Ninety Five Thousand Six Hundred Dollars (\$4,095,600), paid on a time and materials basis in accordance with the schedule of fees contained in **Exhibit A**, and a contingency amount not to exceed Four Hundred and Nine Thousand Five Hundred Sixty Dollars (\$409,560) for any additional work rendered pursuant to Subsection (c) below and authorized in writing by the Director.

(b) Detailed statements shall be rendered monthly and will be payable in the normal course of City business. The City shall not be obligated to reimburse any expense for which it has not received a detailed invoice with applicable copies of representative and identifiable receipts or records substantiating such expense.

(c) The parties may modify this Agreement to increase or decrease the scope of services or provide for the rendition of services not required by this Agreement, which modification shall include an adjustment to the Consultant's compensation. Any change in the scope of services must be made by written amendment to the Agreement signed by an authorized representative for each party. The Consultant shall not be entitled to any additional compensation if services are performed prior to a signed written amendment.

4. Termination, Remedies, and Force Majeure.

(a) This Agreement shall terminate without any liability of the City to the Consultant upon the earlier of: (i) the Consultant's filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against the Consultant; (ii) seven calendar days prior written notice with or without cause by the City to the Consultant; (iii) the City's non-appropriation of funds sufficient to meet its obligations hereunder during any City fiscal year of this Agreement, or insufficient funding for the Project; or (iv) expiration of this Agreement.

(b) Immediately upon any termination or expiration of this Agreement, the Consultant shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to the City any and all unearned payments and all properties and materials in the possession of the Consultant that are owned by the City. Subject to the terms of this Agreement, the Consultant shall be paid compensation for services satisfactorily performed prior to the effective date of termination. The Consultant shall not be paid for any work or services performed or costs incurred which reasonably could have been avoided.

(c) In the event of termination due to failure of the Consultant to satisfactorily perform in accordance with the terms of this Agreement, the City may withhold an amount that would otherwise be payable as an offset to, but not in excess of, the City's damages caused by such failure. In no event shall any payment by the City pursuant to this Agreement constitute a waiver by the City of any breach of this Agreement which may then exist on the part of the Consultant, nor shall such payment impair or prejudice any remedy available to the City with respect to the breach.

(d) Upon any breach of this Agreement by the Consultant, the City may (i) exercise any right, remedy (in contract, law or equity), or privilege which may be available to it under applicable laws of the State of California or any other applicable law; (ii) proceed by appropriate court action to enforce the terms of the Agreement; and/or (iii) recover all direct, indirect, consequential, economic and incidental damages for the breach of the Agreement. If it is determined that the City improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) The Consultant shall provide the City with adequate written assurances of future performance, upon Director's request, in the event the Consultant fails to comply with any terms or conditions of this Agreement.

(f) The Consultant shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Consultant and without its fault or negligence such as, acts of God or the public enemy, acts of the City in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Consultant shall notify Director in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, and shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to Director of the cessation of such occurrence.

5. Confidential Information, Ownership of Documents and Copyright License.

(a) Any reports, information, or other data prepared or assembled by the Consultant pursuant to this Agreement shall not be made available to any individual or organization by the Consultant without the prior written approval of the City. During the term of this Agreement, and thereafter, the Consultant shall not, without the prior written consent of the City, disclose to anyone any Confidential Information. The term Confidential Information for the purposes of this Agreement shall include all proprietary and confidential information of the City, including but not limited to business plans, marketing plans, financial information, designs, drawings, specifications, materials, compilations, documents, instruments, models, source or object codes and other information disclosed or submitted, orally, in writing, or by any other medium or media. All Confidential Information shall be and remain confidential and proprietary in the City.

(b) Any and all original sketches, pencil tracings of working drawings, plans, computations, specifications, computer disk files, writings and other documents prepared or provided by the Consultant pursuant to this Agreement are the property of the City at the time of preparation and shall be turned over to the City upon expiration or termination of the Agreement or default by the Consultant. The Consultant grants the City a copyright license to use such drawings and writings. The Consultant shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein. The City may modify the design including any drawings or writings. Any use by the City of the aforesaid sketches, tracings, plans, computations, specifications, computer disk files, writings and other documents in completed form as to other projects or extensions of this Project, or in uncompleted form, without specific written verification by the Consultant will be at the City's sole risk and without liability or legal exposure to the Consultant. The Consultant may keep a copy of all drawings and specifications for its sole and exclusive use.

(c) If the Consultant should subcontract all or any portion of the services to be performed under this Agreement, the Consultant shall cause each subcontractor to also comply with the requirements of this Section 5.

(d) This Section 5 shall survive expiration or termination of this Agreement.

6. Professional Skill. It is further mutually understood and agreed by and between the parties hereto that inasmuch as the Consultant represents to the City that the Consultant and its subcontractors, if any, are skilled in the profession and shall perform in accordance with the standards of said profession necessary to perform the services agreed to be done by it under this Agreement, the City relies upon the skill of the

Consultant and any subcontractors to do and perform such services in a skillful manner and the Consultant agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such services by the City shall not operate as a release of the Consultant or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law including California Civil Code section 2782.8, the Consultant shall indemnify, hold harmless and defend the City and each of its officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage), and from any and all claims, demands and actions in law or equity (including reasonable attorney's fees and litigation expenses) that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the Consultant, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If the Consultant should subcontract all or any portion of the services to be performed under this Agreement, the Consultant shall require each subcontractor to indemnify, hold harmless and defend the City and each of its officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

This section shall survive termination or expiration of this Agreement.

8. Insurance.

(a) Throughout the life of this Agreement, the Consultant shall pay for and maintain in full force and effect all insurance as required in **Exhibit B**, which is incorporated into and part of this Agreement, with an insurance company(ies) either (i) admitted by the California Insurance Commissioner to do business in the State of California and rated no less than "A-VII" in the Best's Insurance Rating Guide, or (ii) as may be authorized in writing by the City's Risk Manager or designee at any time and in its sole discretion. The required policies of insurance as stated in Exhibit B shall maintain limits of liability of not less than those amounts stated therein. However, the insurance limits available to the City, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified therein or the full limit of any insurance proceeds to the named insured.

(b) If at any time during the life of the Agreement or any extension, the Consultant or any of its subcontractors/sub-consultants fail to maintain any required insurance in full force and effect, all services and work under this Agreement shall be discontinued immediately, and all payments due or that become due to the Consultant shall be withheld until notice is received by the City that the required insurance has been restored to full force and effect and that the premiums therefore have been paid for a period satisfactory to the City. Any failure to maintain the required insurance shall be sufficient cause for the City to terminate this Agreement. No action taken by the City pursuant to this section shall in any way relieve the Consultant of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by the City that an insurer has commenced proceedings, or has had proceedings commenced against it, indicating that the insurer is insolvent.

(c) The fact that insurance is obtained by the Consultant shall not be

deemed to release or diminish the liability of the Consultant, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify the City shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by the Consultant. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of the Consultant, its principals, officers, agents, employees, persons under the supervision of the Consultant, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) If the Consultant should subcontract all or any portion of the services to be performed under this Agreement, the Consultant shall require each subcontractor/sub-consultant to provide insurance protection, as an additional insured, to the City and each of its officers, officials, employees, agents and volunteers in accordance with the terms of this section, except that any required certificates and applicable endorsements shall be on file with the Consultant and the City prior to the commencement of any services by the subcontractor. The Consultant and any subcontractor/sub-consultant shall establish additional insured status for the City, its officers, officials, employees, agents and volunteers by using Insurance Service Office (ISO) Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to the City's execution of this Agreement, the Consultant shall complete a City of Fresno conflict of interest disclosure statement in the form as set forth in **Exhibit C**. During the term of this Agreement, the Consultant shall have the obligation and duty to immediately notify the City in writing of any change to the information provided by the Consultant in such statement.

(b) The Consultant shall comply, and require its subcontractors to comply, with all applicable (i) professional canons and requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code Section 1090 et. seq., the California Political Reform Act (California Government Code Section 87100 et. seq.), the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.) and Section 4-112 of the Fresno Municipal Code (Ineligibility to Compete). At any time, upon written request of the City, the Consultant shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, the Consultant and the respective subcontractor(s) are in full compliance with all laws and regulations. The Consultant shall take, and require its subcontractors to take, reasonable steps to avoid any appearance of a conflict of interest. Upon discovery of any facts giving rise to the appearance of a conflict of interest, the Consultant shall immediately notify the City of these facts in writing.

(c) In performing the work or services to be provided hereunder, the Consultant shall not employ or retain the services of any person while such person either is employed by the City or is a member of any City council, commission, board,

committee, or similar City body. This requirement may be waived in writing by the City Manager, if no actual or potential conflict is involved.

(d) The Consultant represents and warrants that it has not paid or agreed to pay any compensation, contingent or otherwise, direct or indirect, to solicit or procure this Agreement or any rights/benefits hereunder.

(e) Neither the Consultant, nor any of the Consultant's subcontractors performing any services on this Project, shall bid for, assist anyone in the preparation of a bid for, or perform any services pursuant to, any other contract in connection with this Project. The Consultant and any of its subcontractors shall have no interest, direct or indirect, in any other contract with a third party in connection with this Project unless such interest is in accordance with all applicable law and fully disclosed to and approved by the City Manager, in advance and in writing.

(f) If the Consultant should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, the Consultant shall include the provisions of this Section 9 in each subcontract and require its subcontractors to comply therewith.

(g) This Section 9 shall survive expiration or termination of this Agreement.

10. Recycling Program. In the event the Consultant maintains an office or operates a facility(ies), or is required herein to maintain or operate same, within the incorporated limits of the City of Fresno, the Consultant at its sole cost and expense shall:

(a) Immediately establish and maintain a viable and ongoing recycling program, approved by the City's Solid Waste Management Division, for each office and facility. Literature describing the City recycling programs is available from the City's Solid Waste Management Division and by calling the City of Fresno Recycling Hotline at (559) 621-1111.

(b) Immediately contact the City's Solid Waste Management Division at (559) 621-1452 and schedule a free waste audit, and cooperate with such Division in their conduct of the audit for each office and facility.

(ci) Cooperate with and demonstrate to the satisfaction of the City's Solid Waste Management Division the establishment of the recycling program in paragraph (i) above and the ongoing maintenance thereof.

11. General Terms.

(a) Except as otherwise provided by law, all notices expressly required of the City within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Director or designee.

(b) Records of the Consultant's expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to the City or its authorized representatives upon request during regular business hours throughout the life of this Agreement and for a period of three years after final payment or, if longer, for any period required by law. In addition, all books, documents, papers, and records of the Consultant pertaining to the Project shall be available for the purpose of making audits, examinations, excerpts, and transcriptions for the same period of time. If any litigation,

claim, negotiations, audit or other action is commenced before the expiration of said time period, all records shall be retained and made available to the City until such action is resolved, or until the end of said time period whichever shall later occur. If the Consultant should subcontract all or any portion of the services to be performed under this Agreement, the Consultant shall cause each subcontractor to also comply with the requirements of this paragraph. This Section 11(b) shall survive expiration or termination of this Agreement.

(c) Prior to execution of this Agreement by the City, the Consultant shall have provided evidence to the City that the Consultant is licensed to perform the services called for by this Agreement (or that no license is required). If the Consultant should subcontract all or any portion of the work or services to be performed under this Agreement, the Consultant shall require each subcontractor to provide evidence to the City that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, the Consultant shall not employ discriminatory practices in the provision of services, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Subject to the foregoing and during the performance of this Agreement, the Consultant agrees as follows:

(a) The Consultant will comply with all applicable laws and regulations providing that no person shall, on the grounds of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Agreement.

(b) The Consultant will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. The Consultant shall ensure that applicants are employed, and the employees are treated during employment, without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Such requirement shall apply to the Consultant's employment practices including, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the Consultant in pursuit hereof, state that all qualified applicants will receive consideration for employment without regard to race,

religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era.

(d) The Consultant will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of the Consultant's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) If the Consultant should subcontract all or any portion of the services to be performed under this Agreement, the Consultant shall cause each subcontractor to also comply with the requirements of this Section 12.

13. Independent Contractor.

(a) In the furnishing of the services provided for herein, the Consultant is acting solely as an independent contractor. Neither the Consultant, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of the City for any purpose. The City shall have no right to control or supervise or direct the manner or method by which the Consultant shall perform its work and functions. However, the City shall retain the right to administer this Agreement so as to verify that the Consultant is performing its obligations in accordance with the terms and conditions thereof.

(b) This Agreement does not evidence a partnership or joint venture between the Consultant and the City. The Consultant shall have no authority to bind the City absent the City's express written consent. Except to the extent otherwise provided in this Agreement, the Consultant shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, the Consultant and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to City employees. The Consultant shall be solely liable and responsible for all payroll and tax withholding and for providing to, or on behalf of, its employees all employee benefits including, without limitation, health, welfare and retirement benefits. In addition, together with its other obligations under this Agreement, the Consultant shall be solely responsible, indemnify, defend and save the City harmless from all matters relating to employment and tax withholding for and payment of the Consultant's employees, including, without limitation, (i) compliance with Social Security and unemployment insurance withholding, payment of workers' compensation benefits, and all other laws and regulations governing matters of employee withholding, taxes and payment; and (ii) any claim of right or interest in the City employment benefits, entitlements, programs and/or funds offered employees of the City whether arising by reason of any common law, de facto, leased, or co-employee rights or other theory. It is acknowledged that during the term of this Agreement, the Consultant may be providing services to others unrelated to the City or to this Agreement.

14. Notices. Any notice required or intended to be given to either party under the terms of this Agreement shall be in writing and shall be deemed to be duly given if delivered personally, transmitted by facsimile followed by telephone confirmation of receipt, or sent by United States registered or certified mail, with postage prepaid, return

receipt requested, addressed to the party to which notice is to be given at the party's address set forth on the signature page of this Agreement or at such other address as the parties may from time to time designate by written notice. Notices served by United States mail in the manner above described shall be deemed sufficiently served or given at the time of the mailing thereof.

15. Binding. Subject to Section 16, below, once this Agreement is signed by all parties, it shall be binding upon, and shall inure to the benefit of, all parties, and each parties' respective heirs, successors, assigns, transferees, agents, servants, employees, and representatives.

16. Assignment.

(a) This Agreement is personal to the Consultant and there shall be no assignment by the Consultant of its rights or obligations under this Agreement without the prior written approval of the City Manager or designee. Any attempted assignment by the Consultant, its successors or assigns, shall be null and void unless approved in writing by the City Manager or designee.

(b) The Consultant hereby agrees not to assign the payment of any monies due the Consultant from the City under the terms of this Agreement to any other individual(s), corporation(s) or entity(ies). The City retains the right to pay any and all monies due the Consultant directly to the Consultant.

17. Compliance With Law. In providing the services required under this Agreement, the Consultant shall at all times comply with all applicable laws of the United States, the State of California and the City, and with all applicable regulations promulgated by federal, state, regional, or local administrative and regulatory agencies, now in force and as they may be enacted, issued, or amended during the term of this Agreement.

18. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement. No provisions of this Agreement may be waived unless in writing and signed by all parties to this Agreement. Waiver of any one provision herein shall not be deemed to be a waiver of any other provision herein.

19. Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction. Venue for purposes of the filing of any action regarding the enforcement or interpretation of this Agreement and any rights and duties hereunder shall be Fresno County, California.

20. Headings. The section headings in this Agreement are for convenience and reference only and shall not be construed or held in any way to explain, modify or add to the interpretation or meaning of the provisions of this Agreement.

21. Severability. The provisions of this Agreement are severable. The invalidity, or unenforceability of any one provision in this Agreement shall not affect the other provisions.

22. Interpretation. The parties acknowledge that this Agreement in its final form

is the result of the combined efforts of the parties and that, should any provision of this Agreement be found to be ambiguous in any way, such ambiguity shall not be resolved by construing this Agreement in favor of or against either party, but rather by construing the terms in accordance with their generally accepted meaning.

23. Attorney's Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorney's fees and legal expenses.

24. Exhibits. Each exhibit and attachment referenced in this Agreement is, by the reference, incorporated into and made a part of this Agreement.

25. Precedence of Documents. In the event of any conflict between the body of this Agreement and any exhibit or attachment hereto, the terms and conditions of the body of this Agreement shall control and take precedence over the terms and conditions expressed within the exhibit or attachment. Furthermore, any terms or conditions contained within any exhibit or attachment hereto which purport to modify the allocation of risk between the parties, provided for within the body of this Agreement, shall be null and void.

26. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

27. No Third Party Beneficiaries. The rights, interests, duties and obligations defined within this Agreement are intended for the specific parties hereto as identified in the preamble of this Agreement. Notwithstanding anything stated to the contrary in this Agreement, it is not intended that any rights or interests in this Agreement benefit or flow to the interest of any third parties.

28. Extent of Agreement. Each party acknowledges that they have read and fully understand the contents of this Agreement. This Agreement represents the entire and integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be modified only by written instrument duly authorized and executed by both the City and the Consultant.

29. The City Manager, or designee, is hereby authorized and directed to execute and implement this Agreement. The previous sentence is not intended to delegate any authority to the City Manager to administer the Agreement, any delegation of authority must be expressly included in the Agreement.

[Signatures follow on the next page.]

IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

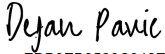
CITY OF FRESNO,
a California municipal corporation


By: _____
Brock D. Buche, PE, PLS,
Director of Public Utilities
Department of Public Utilities

ATTEST:
TODD STERMER, CMC
City Clerk

By: _____
Clerk Attesting
Deputy

No signature of City Attorney required.
Standard Document **#DPU-S Eng. CSA, Short Form T&M - Contingency (04-2022)** has been used without modification, as certified by the undersigned.


By:  5/13/2022
Dejan Pavic, PE
Projects Administrator
Department of Public Utilities

REVIEWED BY:  5/13/2022
Jesus A. Gonzalez, PE,
Public Utilities Manager
Department of Public Utilities


Addresses:

CITY:
City of Fresno
Attention: Dejan Pavic, PE,
Projects Administrator
2600 Fresno Street, Room 4019
Fresno, CA 93721
Phone: (559) 621-8612
Facsimile (559) 457-1233
E-mail: Dejan.Pavic@fresno.gov

Carollo Engineers, Inc.,
a Delaware corporation

By:  5/13/2022
Name: Paul Amico

Title: Vice President
(If corporation or LLC., Board Chair, Pres. or Vice Pres.)

By:  5/13/2022
Name: Michael Barnes

Title: Secretary
(If corporation or LLC., CFO, Treasurer, Secretary or Assistant Secretary)

Any Applicable Professional License:
Number: C64648
Name: Paul Amico
Date of Issuance: January 23, 2003

CONSULTANT:
Carollo Engineers, Inc.
Attention: Paul Amico, Vice President
1401 Fulton Street, Suite 802
Fresno, CA 93721
Phone: (559) 436-6616
Facsimile" (559) 436-1191
E-mail pamico@carollo.com

Attachments:

1. Exhibit A - Scope of Services
2. Exhibit B - Insurance Requirements
3. Exhibit C - Conflict of Interest Disclosure Form

EXHIBIT A

SCOPE OF SERVICES

Consultant Service Agreement between City of Fresno (City) and Carollo Engineers, Inc., (Consultant)

Project Management and Engineering Design Services for the Sidestream Treatment
System at the Fresno-Clovis Regional Wastewater Reclamation Facility

See attached

Project Management and Design Services for Sidestream Treatment System at the Fresno-Clovis Regional Wastewater Reclamation Facility (Bid File No. 10107)

SCOPE OF SERVICES

BACKGROUND AND ASSUMPTIONS

The RWRF is a secondary treatment plant with an annual rated capacity of 91.5 million gallons per day (mgd) and a maximum month rated capacity of 101 mgd. The City has a land-based disposal permit operating under Waste Discharge Permit (WDR) R5-2018-0080. In 2018, the Central Valley Regional Water Quality Control Board amended the Water Quality Control Plan for the San Joaquin River Basin to incorporate a Salt and Nutrient Management Plan (SNMP). The SNMP lays the groundwork for monitoring salts and nitrate throughout the Central Valley. As a result, the City is anticipating a new WDR that will limit effluent nitrate concentrations to 10 milligrams per liter (mg/l) nitrate nitrogen (NO₃-N), with an action plan requirement of maximum effluent nitrate concentrations of 7.5 mg/l NO₃-N. RWRF facility upgrades are needed to meet these anticipated nitrate targets.

To develop an approach for meeting anticipated nitrate goals, a Nitrate Assessment and Treatment Evaluation Study (NATES) was completed in August 2020. The NATES evaluated nitrate removal treatment alternatives and developed a Basis of Design Report (BODR). Several alternatives were evaluated and the BODR report recommended that the ANITA™ Mox sidestream treatment system manufactured by Kruger (a subsidiary of Veolia Water Technologies) be incorporated into the RWRF. The ANITA™ Mox process for de-ammonification of the centrate is a single-stage nitrogen removal process based on a Moving Bed Biofilm Reactor (MBBR) platform. The process is specifically designed for treatment of waste streams with high ammonia concentrations.

The scope of this project is to pilot, design, and provide engineering services during construction for the ANITA Mox system. The scope also includes supplementary project management and environmental documentation and permitting. The contracted services shall be accomplished through a three-part work plan including but not be limited to the following (note: each part of the work plan shall include providing periodic updates to, and answering questions by, regulatory agencies, if applicable, whether expressly stated or not):

Assumptions:

- The project will start in June 2022 and be complete in 2026. Task durations will be similar to what is included in our proposal.
- Construction Management and special inspection and testing will be conducted/coordinated by the City. Our team's scope of services could be significantly impacted by any changes to the CM's scope, especially during construction.

- Construction duration is 18 months until startup and another 6 months until closeout (24 total months).
- All monthly status reports will be delivered electronically.
- The City shall furnish Consultant available studies, reports and other data pertinent to Consultant's services; obtain or authorize Consultant to obtain or provide additional reports and data as required; furnish to Consultant services of others required for the performance of Consultant's services hereunder, and Consultant shall be entitled to use and reasonably rely upon all such information and services provided by the City or others in performing Consultant's services.

Part 1 – PROJECT MANAGEMENT AND DESIGN SERVICES

The Consultant shall provide all qualified personnel, materials, equipment, and incidentals required for Project Management and for the complete design of the Sidestream Treatment System at the RWRP. Services provided shall include, but not be limited to the following:

Task 1 – Project Management

The purpose of this task is to establish and maintain effective responsible charge for the Project. The Consultant's role in this Project will include serving as the Project Team lead and to act as the City's Project Manager (PM) for the life of the Project and to complete duties typically conducted by the City PM, along with the regular duties as the Project Team Lead. The Consultant's designated PM is expected to serve in this function for the life of the Project.

Consultant shall report to, and coordinate with, an executive committee designated for this Project by the DPU. Consultant shall be responsible for coordination with, including but not limited to, all stakeholders, regulatory agencies, and City departments.

The PM is solely accountable for City and stakeholder satisfaction and the overall performance of the Project. The PM will be responsible for the Project meeting its goals in technical scope, schedule, and budget, from start to finish. The PM is in "Responsible Charge" for the Project.

The PM oversees and coordinates technical work with the Project Engineer (PE), Construction Manager (CM), and other resources assigned to the Project. The PM administers all contracts with its subconsultants; however, the City will retain authority to hire the construction contractor and will perform Construction Management activities.

The PM shall maintain an open dialog with the Project stakeholders and will facilitate all communications so that they are both timely and effective. The PM

will use standard guidelines and templates for planning, executing, controlling, and reporting on the performance of the Project.

In providing opinions of cost, financial analyses, economic feasibility projections, schedules, and quantity and/or quality estimates for potential projects, the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; the incoming water quality and/or quantity; the way City's plant(s) and/or associated processes are operated and/or maintained; and other economic and operational factors that may materially affect the ultimate project elements, including, but not limited to, cost or schedule. Therefore, Consultant makes no warranty that the City's actual project costs, financial aspects, economic feasibility, schedules, and/or quantities or quality realized will not vary from Consultant's opinions, analyses, projections, or estimates.

I. Project Administration and Controls

A. Start-up of Project Management Office

The PM will define the organizational structure of the Project Management Office (PMO). Conceptually this will include the Consultant's designated PM, and any needed support staff. It is desirable, but not mandatory, that the PMO have a local presence. Develop a detailed schedule identifying all tasks to set-up the PMO. Project Management Office will be located at Carollo's Fresno office at 1401 Fulton Street, Suite 802, Fresno, CA, 93721..

Deliverables:

- Commencement meeting agenda, materials, and meeting minutes
- One Organizational Chart
- Key personnel contact

B. Project Management Plan

Review the DPU's existing Project Management Plan (PMP), to determine if it adequately defines critical elements of the Project, and the metrics to measure successful completion of these elements. The PM shall make recommendations for changes and improvements, if warranted. This PMP may include, but not

limited to defining:

- Work breakdown structures
- Project schedules, budgets, and milestones
- Quality control requirements
- Internal and external communication protocol
- Reporting requirements (weekly minutes, monthly progress reports and decision logs, etc.)

Deliverables:

- Updated Project Management Plan

C. Cost/Change Management

The PMO will monitor cost management procedures and requests through the completion of constructions. This will include contractor's change order control and contractor payment applications. The CM is responsible for managing the change management process in conformance with the requirements in the contract documents, and the guidelines approved by the City. The CM is also responsible for leading the negotiations of and/or time impacts and providing recommendations for the disposition of changes. The CM will maintain change management files and records of negotiations, and maintain the change order log.

Deliverables:

- Monthly Project cost/change status report

D. Procurement Support

Provide support developing RFPs and selection of professional services contracts, equipment selection, purchase order contracts, and other procurement needs in support of the Project. The level of effort for this task is based on an allowance of 40 hours. If competitive bid documents are needed for pre-purchase or pre-selection of the ANITA Mox package, additional effort may be needed.

II. Project Controls

Review in-place DPU processes, applications, and procedures to establish controls for scope, schedule, cost, documents, data, risk, and key elements of Program Management.

A. Computerized Project Management Software

PMO will coordinate and communicate project milestones and progress to DPU's Project Controls group for inclusion with the in-place system.

B. Master Project Schedule

DPU uses P6 for tracking of project schedules. Develop a master schedule for the Project elements and maintain it through all anticipated activities associated with the Project. The schedule shall be developed using the critical path method and shall contain necessary program level and project level activities as required. Coordinate with the DPU Project Controls group to maintain the schedule in the DPU's P6 system.

Deliverables:

- Monthly reporting to DPU Project Controls on the Projects schedule status.

C. Monitor Cost/Cash Flow

DPU uses P6 for tracking of project costs and annual budgets. Develop the Project master cost baseline, maintain Project budgets and costs, and report monthly on the overall actuals and anticipated cost of the entire Project.

- Produce cash flow projections on a monthly basis
- Produce monthly budget reports
- Develop Project cost estimating manual

Deliverables:

- Monthly reporting to DPU Project Controls on the Project costs and budget.

D. Independent Cost Estimates

Provide independent construction cost estimates for the Project. This may entail using a subconsultant to provide an independent cost estimate as needed throughout the life of the Project. Provide peer review of design team cost estimates.

Deliverables:

- Update Project construction cost estimate with each set of project milestone deliverable, i.e., 30%, 60%, 90%, and 100%.

E. Prepare Status Reports

Monthly progress reports. The report will contain an executive summary, Project progress, cost, cash flow, schedule, tasks, highlight of potential short/mid-term risks, and specifics on the pilot test, design, and construction progress including contract change orders.

Deliverables:

- Monthly progress reports

F. Document Management

Establish and maintain an electronic document management system, including processes and procedures that provide for the safe storage and access to documents, and results in their eventual transfer to DPU. The Consultant will work with DPU staff to develop an acceptable system that meets the needs of the Project. Documents generated by the Project may initially be stored in the selected document management system for the PMO, but a process will be developed defining how and when to transfer the information into DPU's system. Additional tasks include:

- Incorporate City's records retention policy requirements when setting up the file system that will be used by the PM, engineers, and staff.
- Provide staff for duration of the contract to oversee the critical reports, plans, and details of all pertinent documentation, and make sure that DPU maintains custody of critical hard copies. Documentation library will be located at a DPU facility.
- Build on the existing DPU guideline, define document management guidelines for the Project.

G. Asset Data Management

Working with Wastewater Management Division staff, review the existing data management plan that defines how equipment data, including operation and maintenance requirements, will be captured and managed. The plan will address data management requirements over the life of the Project and confirm all required information is properly captured and transferred to the DPU's asset management system. The Consultant will provide staff to support the asset data management effort throughout the life of the Project.

H. Contract Management

Help administer and manage the professional services contracts developed under this Project, including but not limited to the following tasks:

- Identify standards and procedures for invoicing and approvals.
- Review invoices and provide recommendations for approval.
- Track scope and costs against progress.

- Identify and quantify changes in scope and assist with preparation of amendments.

I. Risk Management

Develop program and project level risk management plans for the preparation and maintenance of a risk register for the Project. Define and implement the process for identifying program and project risks and opportunities. A draft risk register will be developed for the Project that includes identification of risks and opportunities, calculation of impacts, and approach mitigation. Conduct workshop with DPU to refine and modify the draft Risk Register. Identify all programmatic and project related risks (e.g., schedule, cost escalation, market conditions), the mitigating strategies, likelihood of failure, and cost of each level of risks.

Deliverables:

- Draft Project Risk Register.
- Risk workshop agenda, presentation materials, and workshop minutes.

III. Project Quality

Review DPU's Project Quality Assurance/Quality Control Plan to evaluate adequacy and make recommendations for changes, if warranted.

Deliverables:

- Updated QA/QC Plan.

IV. Project Health and Safety

Review DPU's existing Health and Safety Plan to generally evaluate adequacy and make recommendations for changes, if warranted. Confirm, in general, if the plan defines requirements for project-specific safety plan.

Deliverables:

- Updated Health and Safety Plan.

V. Administration Support (Optional/Special Services)

Consultant contract will include scope and budget for administrative support as an optional service. If deemed necessary, the Consultant may be asked to provide personnel and services required for the various functions within the Project, such as assist with preparing council packages and reports, scheduling meetings, making telephone call to remind key staff and stakeholders of significant meetings, maintain attendance logs and contact information, and preparing meeting minutes. This resource would also maintain a log of all presentation materials. The Consultant's level of effort and cost information submitted

with its proposal should not include this optional service. No effort has been allocated to this task.

TASK 2 – Permitting and Non-design Support Services

Work to include notifying the Regional Board of changes to the RWRF Waste Discharge Requirements.

TASK 3 – Phase 1 – Schematic Design

I. Peer Review

Consultant shall review the BODR and identify opportunities to refine or optimize the proposed criteria and improvements for the project. The purpose of this task will NOT be to re-evaluate or change the side-stream technology selection, but to build upon the BODR by identifying ways to either improve process performance, operation, or reduce costs. The deliverable from this task will be a brief memo summarizing findings and recommendations to carry forward into the final design. The memo will include the cost and benefit for each of the proposed recommendations. The memo will be delivered electronically.

Effort for this task will be completed by members of the project team (not by a third-party)

Viability of opportunities to refine or optimize the proposed criteria and improvements for the project may require testing and troubleshooting during the piloting effort.

The design assumes process aeration for the sidestream treatment basin will be supplied from existing blower capacity from Blower Building #2. Providing new blowers dedicated to the sidestream treatment process will affect the scope of work and design effort.

II. Engineering Support Field Work – Surveying

Surveyor shall provide topographic and other necessary surveys for completion of the project design.

Assumptions:

- Services provided in this task include completion of survey information only and shall furnish a design field survey including, but not be limited to the following elements:
 - Basis of Bearings
 - Elevation Datum
 - Contour lines (at 1-foot intervals)
 - Existing structures
 - Bond locations
 - Utility manhole or valve box locations

- Other utility locations (telephone, gas, power, water, sewer, etc.)

Deliverables:

- Stamped and signed topographic survey map(s), in AutoCAD 2020.

III. Engineering Support Field Work – Geotechnical

Geotechnical Consultant shall provide hazardous conditions explorations and geotechnical data required for structural and civil design, including but not limited to:

- Recommended site-specific seismic spectral analysis and design criteria as required to meet Building Code seismic design
- Soil stability and recommended measures for unstable soils as related to open trench excavation, open cut construction, and micro tunneling or directional drilling
- Unusable soil areas shall be investigated to include soil laboratory test results. The vertical and lateral limits of the unsuitable shallow surface deposits shall be determined. Recommendations for excavation and replacement of unsuitable materials shall be included in the report
- Groundwater elevation
- Recommended foundation sub-base
- Corrosively evaluation of soils
- Expected structural settlement

Assumptions:

- Consultant shall secure any special permits required for geotechnical field investigations.
- The scope of work includes standard lab analysis to confirm soil type and grain size distribution, compaction requirements, potential for settlement/liquefaction, and soil chemical properties including corrosion potential.

Deliverables:

- Draft and Final Geotechnical Report – three (3) hard copies of each and electronic files in MS Word and PDF.

IV. Basis of Design Report/Pilot Study

A Basis of Design Report has been prepared and is included as Attachment 4. The Consultant shall review said report and use the report as the basis of project design.

Pilot Study- The ANITA™- Mox process will be piloted on-site for a

period of four months as part of the design process to help refine design criteria and expected performance. The pilot will arrive on-site fully seeded. Veolia's trailer mounted pilot unit will be scheduled for installation on-site. Consultant will develop an ANITA™-Mox pilot program that will include coordination with system representatives and City staff to obtain the unit, identifies installation conditions and develop a pilot study schedule, operation plan and Technical Memorandum of Pilot Study results. Consultant shall be responsible for close out of the Pilot Study and return of the ANITA™-Mox pilot unit to the vendor. City will provide electrical power and water utilities for the system. City will provide on-site staff to perform daily operations and sampling of the pilot system (approximately 2 hours a day). Consultant, in correspondence with Kruger, will provide direction to City staff.

The Pilot Study Program Schedule and Operational Plan will identify operational changes to the existing plant processes to determine how they affect the sidestream characteristics. The City shall be able to coordinate with the Consultant and Kruger to implement operational changes within a timely manner.

Deliverables:

- Draft and Final Pilot Study Program Schedule and Operational Plan (electronic files in MS Word and PDF).
- Draft and Final Pilot Study Technical Memorandum of Pilot Study results (electronic files in MSWord and PDF).

V. Schematic Design Documents

Consultant shall complete the Schematic Design Documents (30 percent design documents) for the Project based on the BODR documents and Pilot Study results. Design services include preparation of design documents, internal design check, and updated construction cost estimate.

Assumptions:

- Consultant will prepare the design drawings using AutoCAD software. Construction drawings will include general, civil, structural, mechanical, electrical, instrumentation, and other typical detail drawings.
- Technical specifications will be prepared using Consultant's standard specifications. General Conditions shall be based on City standard format.

Deliverables:

- Schematic Design Documents — five (5) hard copies and electronic files in AutoCAD, MS Word, and PDF, which shall include but not be limited to the following:

- Revision to basis of design (if necessary) to document key design decision regarding Pilot Study results and any corresponding changes from the preliminary design.
- Control descriptions for sidestream treatment system operation.
- Process and Instrumentation Diagrams (PIDs).
- Updated drawing list.
- Updated civil site layout.
- Updated structural plans and elevations.
- Mechanical equipment layouts with major piping.
- Electrical site layouts.
- Electrical single-line diagram with power sources.
- Electrical plan views for location of major equipment and control panels.
- Control panel elevations.
- Equipment list and equipment data sheets for major equipment.
- Specification table of contents.
- Preliminary specifications for major equipment.

VI. Schematic Design Cost Estimate

The purpose of this task is to prepare cost estimates for the Project based on the final basis of design, schematic design, and project scope.

Deliverables:

- Draft and Final Cost Estimate — five (5) hard copies and electronic files in MS Word and PDF, with cost estimate subdivided by specification section.

VII. Schematic Design Workshop

Consultant will present the 30 percent design submittal for the Project to City staff. The objective of the workshop is to discuss 30 percent design submittal and solicit City review comments. The workshop will be held in-person and effort is based on 7 Consultant attendees.

Deliverables:

- Workshop agenda and handouts — five (5) hard copies of each and electronic files in MS Word and PDF.
- Meeting minutes to document findings, conclusions, and key decisions (electronic files in MS Word and PDF).
- Updated Decision Log (electronic files in MS Word and PDF).

TASK 4 – Phase 2 – Design Development

The purpose of the Phase 2 work is to complete engineering services through 60 percent design. The Phase 2 work will include 60 percent design level submittals and a review workshop with the City.

I. 60 Percent Design Submittal

Design services include preparation of updated design documents, internal review, and updated construction cost estimate for the Project.

Assumptions:

- The 60 percent design package will include specification table of contents and preliminary technical specifications, including for major process equipment.

Deliverables:

- 60 Percent Design Documents — five (5) hard copies and electronic files in AutoCAD, MS Word, and PDF, which shall include but not be limited to the following:
 - Updated control descriptions for the Sidestream System.
 - Updated Process and Instrumentation Diagrams (PIDs).
 - Updated drawing list.
 - Updated civil site layout.
 - Updated structural plans and elevations.
 - Updated mechanical equipment layouts with major piping.
 - Updated electrical site layouts.
 - Updated electrical single-line diagram with power sources.
 - Updated electrical plan views for location of major equipment and control panels.
 - Updated control panel elevations.
 - Updated equipment list and equipment data sheets for major equipment and timelines for long-lead equipment and/or components.
 - Updated specification table of contents.
 - Updated technical specifications, including for major process equipment.

II. 60 Percent Design Cost Estimate

The purpose of this task is to update cost estimates for the Project based on the 60 percent design.

Deliverables:

- Draft and Final Cost Estimate — five (5) hard copies and

electronic files in MS Word and PDF, with cost estimate subdivided by specification section.

III. 60 Percent Design Workshop

Consultant will present the 60 percent design submittal and cost estimate to City staff. The objective of the workshop is to discuss changes from the 30 percent design and solicit City review comments. The workshop will be held in-person and effort is based on 7 Consultant attendees.

Deliverables:

- Workshop agenda and handouts — five (5) hard copies of each and electronic files in MS Word and PDF, excluding 60-Percent Design Documents.
- Meeting minutes to document findings, conclusions, and key decisions (electronic files in MS Word and PDF).
- Updated Decision Log (electronic files in MS Word and/or PDF).

TASK 5 – Phase 3 – Contract Documents

The purpose of the Phase 3 work is to complete engineering services through 90 and 100 percent design. The Phase 3 work will include a 90 percent design review workshop with the City and will culminate in 100 percent design level submittal of bid-ready contract documents.

I. 90 Percent Design Submittal

Design services include preparation of updated design documents, internal review, and updated construction cost estimate.

Assumptions:

- Consultant will meet with and coordinate review of the 90 percent design documents as necessary to facilitate approval with other City departments, including Building & Safety. Consultant will obtain a commercial building permit and grading permit through the City Planning and Development Department.
- City will pay all Planning and Development permitting fees.
- The City shall be responsible for providing front-end specifications that are approved by the Planning and Development departments.
- The 90 percent design package will include specification table of contents and final technical specifications, including for major process equipment.

Deliverables:

- 90 Percent Design Documents — five (5) hard copies and

electronic files in AutoCAD, MS Word, and PDF, which shall include but not be limited to the following:

- Final control descriptions for the Sidestream System.
- Final Process and Instrumentation Diagrams (PIDs).
- Final drawing list.
- Final civil site layout.
- Final structural plans and elevations.
- Final mechanical equipment layouts with major piping.
- Final electrical site layouts (including load banks).
- Final electrical single-line diagram with power sources.
- Final electrical plan views for location of major equipment and control panels.
- Final control panel elevations.
- Final specification.
- Final Boilerplate Front-end Bidding Documents

II. 90 Percent Design Cost Estimate

The purpose of this task is to update cost estimates for the Project based on the 90 percent design.

Deliverables:

- Draft and Final Cost Estimate — five (5) hard copies and electronic files in MS Word and PDF, with cost estimate subdivided by specification section.

III. 90 Percent Design Workshop

Consultant will present the 90 percent design submittal and cost estimate to City staff. The objective of the workshop is to discuss changes from the 60 percent design and solicit City review comments. The workshop will be held in-person and effort is based on 7 Consultant attendees.

Deliverables:

- Workshop agenda and handouts— five (5) hard copies of each and electronic files in MS Word and PDF, excluding 90 Percent Design Documents.
- Meeting minutes to document findings, conclusions, and key decisions (electronic file in MS Word and PDF).
- Updated Decision Log (electronic files in MS Word and PDF).

IV. 100 Percent Design Submittal

Consultant shall deliver final permitted plans and specifications,

stamped and signed, ready to issue for bid. Consultant will incorporate comments from the City review of the 90 percent submittal into a final set of drawings and specifications that are stamped and signed.

Assumptions:

- Consultant will reproduce the Contract Documents for bidding purposes.
- The PM, with aid from the City, will advertise the Project and will be responsible for reproduction of bid documents.

Deliverables:

- All review agencies approval of plans.
- Two (2) copies of 24" x 36" final drawings and specifications complete and bound for City reference sets.
- Two (2) copies of 11" x 17" final drawings and specifications complete and bound as a bid document.
- One (1) print ready master set of final drawings and specifications, stamped, and signed.
- One (1) electronic copy of the drawing files in AutoCAD and their corresponding plot configuration files in PDF.
- Final cost estimate (electronic file in PDF).
- Final construction schedule (electronic file in PDF).
- Final City Boilerplate Front-end Documents.

Task 6 – Phase 4 – Bid Services

The Purpose of the Phase 4 work is to complete engineering bid period services. The Phase 4 work will include response to bidder questions and bid document addenda. Phase 4 will culminate with the bid review assistance.

I. Pre-Bid Meeting

Consultant will assist the City in meeting with potential bidders at a site tour and provide an understanding of the project requirements. Consultant will develop a preliminary outline for the City's use in conducting the pre-bid conference and site tour. Consultant will prepare and distribute meeting notes to the City.

Deliverables:

- Preliminary outline for pre-bid conference and site tour and attendance at both.
- Meeting minutes for the pre-bid conference and site tours, which will include questions and answers, discussed at the conference (electronic files in MS Word and PDF).

II. Technical Assistance

Consultant will answer bidder technical questions regarding the design during the bidding process.

Assumptions:

- Consultant's level of effort assumes the development of up to four addenda.
- The scope and budget assume addenda will be prepared during the bidding phase.
- The scope and budget assume bidder questions will be logged by the City, delivered to the Consultant as required, and answered by referencing bidder to the appropriate drawings or specifications.

Deliverables:

- Addenda and RFI responses to be distributed to all plan holders by City.
- Bid period question and answer log.

III. Conformed Documents

Consultant shall prepare conformed drawings and specifications (updated design drawings and specifications to include revisions contained in the addenda).

Deliverables:

- One (1) set of specification originals.
- Electronic files of all conformed drawings and specifications in AutoCAD and MS Word and PDF.
- Two (2) sets of conformed half-sized drawings
- Two (2) sets of conformed specification.

Task 7 – Phase 5 – Engineering Support During Construction

The purpose of the Phase 5 work is to provide engineering services during construction. The Phase 5 work will include submittal review, response to questions by (and periodic updates on the Project's status to) the regulatory agencies, response to Contractor questions, change order assistance, site visits/meetings, and startup assistance.

Construction support services include the combined office, engineering, and start-up and training services, and Project Close Out services. Consultant shall provide the construction support services as described herein. The scope of these services will be based on a construction period of 18 months from Contractor notice-to-proceed to Project completion.

For the purposes of the scope of work presented herein, the City's construction

manager will be referred to as 'Construction Manager' or 'CM.'

I. Preconstruction Conference

Consultant will assist the City in attending the preconstruction conference to help provide understanding of the Project and any regulatory requirements to the Contractor and CM.

II. Shop Drawing Review

Consultant shall receive, log, review, comment on and return shop drawings, submittals, and samples provided by the Contractor via the CM. The CM shall screen all submittals for form and general content conforming to that specified in the Contract Documents prior to transmitting them to the Consultant. The purpose of reviewing submittals by Consultant is to determine if the equipment and materials proposed by the Contractor will meet the design intent of the Project and the requirements stipulated in the Contract Documents.

Assumptions:

- Consultant's level of effort assumes the review of fifty (50) original submittals and ten (10) re-submittals.

III. Design Clarifications/Requests for Information

Consultant shall respond to Contractor's Design Clarifications (DCs) and Requests for Information (RFIs) on the Contract Documents forwarded by the CM. The CM will screen the RFIs submitted by the Contractor and will transmit to the Consultant only those RFIs which require a response by the Consultant. The work will involve both written responses to formal RFIs, and informal verbal telephone response.

Assumptions:

- Consultant's level of effort assumes the review of forty-five (45) RFIs.

IV. Change Orders

In the event changes to the Contract Documents are required, the Consultant will assist the CM in review of Change Order Request (COR) and preparation of Change Order (CO). Consultant, at the request of the CM, shall either: review the COR prepared by the CM, or when COR requires redesign, prepare detailed CO specifications, drawings, and/or sketches. Consultant will assist with field changes for which a change order is not issued as referred by the CM. Field changes shall be checked for general compliance with the intent of the design.

Assumptions:

- Consultant's level of effort assumes the review of up to ten CORs.

V. Attendance at meetings/Site Visits

Consultant's representative shall attend and participate in project meetings as necessary at the jobsite. During construction site visits to attend meetings, Consultant's design team's representative shall walk the job site with the CM to observe construction progress and discuss relevant construction issues.

Assumptions:

- Consultant shall attend meetings as necessary for the project duration to facilitate resolution of design issues construction issues as requested by CM or City. Consultant's specialty disciplines shall visit the site as necessary to review the construction progress and assess general conformance with the Contract Documents.
- Consultant's level of effort assumes attendance at a total of fifty construction progress meetings.
- Consultant's level of effort for this task is based on a total of twelve (12) site visits.

Deliverables:

- Summary of field notes to document the site visit (electronic files in MS Word and PDF).

VI. Startup Assistance

Consultant shall assist City, CM, and Contractor in the operation and startup of new processes. Operation and startup assistance shall generally follow procedures outlined in the Contract Documents. Consultant will review Contractor's proposed plan and assist to define initial process set points and operational parameters. Consultant shall be available to resolve startup and process issues, provide consultation, recommendations, and coordination regarding any regulatory requirements.

Assumptions:

The scope and budget assume startup assistance, includes review of Contractor's startup plan and field time during startup and commissioning.

- Consultant's level of effort assumes witness testing based on a total of twenty 8-hour days.
- Consultant's level of effort assumes startup consultation based on twenty hours per week for five weeks to review startup plan and provide recommendations and support during process startup.

Deliverables:

Summary review comments of Contractor's start-up plan

VII. Process Training Services

Consultant will conduct training for each treatment process and related equipment. Training will be tailored to cover the treatment process design and operating intent and will supplement training provided by the equipment manufacturer or supplier.

Assumptions:

- Consultant in cooperation with any contractor requirements, will prepare and conduct classroom presentations, field orientation, and answer sessions — assumption is three (3) sessions each with duration of four (4) hours. Accommodation will need to be made to train the off-shifts (graveyard and swing shifts).

Deliverables:

- Final training presentation materials.

VIII. Record Documents and Project Closeout

Consultant will prepare Record Contract Drawings to incorporate modifications of drawings resulting from design changes, change orders, observed site conditions, and Contractor's record of construction.

Assumptions:

- Construction changes will be monitored and recorded by the Contractor and CM. Consultant will incorporate field markups at the end of construction and translate into electronic Record Contract Drawings.

Deliverables:

- The electronic files of all construction record document (AutoCAD and PDF format).
- Two (2) sets of full-sized drawings
- Five (5) sets of half-sized drawings

IX. Operations and Maintenance Manual

The purpose of this task is to provide information that can be used to update the RWRF's existing Electronic Information Management System (EIMS). This information will provide the City with the necessary information to operate and maintain the equipment in an efficient and reliable manner. Consultant will develop this information and populate the EIMS with O&M content for the Project under this task.

The software platform for the EIMS is based on Microsoft SharePoint Online, an electronic content management system that will contain a variety of operations and maintenance information including facility and

equipment descriptions, design criteria, process control narratives, design drawings, and vendor operations and maintenance (O&M) manuals. Using the EIMS, City staff will be able to access all this information in an electronic format with an easy-to-use, graphical, user interface. In addition, the EIMS will be updatable and expandable for the City's future efforts to improve the overall operations and maintenance of their facilities.

Consultant will populate the following sections of the EIMS for the Project:

- Process Overview Schematic
- Area Procedures and Expectations
- Theory of Operation
- Design Criteria
- Equipment Data
- Instrumental Data
- SOPs/EOPs
- Controls
- Alarms
- Operator Tips
- Safety
- Vendor O&Ms
- Documents
- Photos
- Drawings
- Video Library

City staff will review the draft EIMS section for the Project for content accuracy, level of detail, and conformance with established standards. The review will also be conducted to confirm the EIMS functionality and ease-of-use, including links to appropriate information, editing capabilities, and overall navigation. Comments from City staff and management will be incorporated into the revised and final versions of each EIMS sections to improve the knowledge, accuracy, and usefulness of the O&M information.

Assumptions:

- Server hardware and software licenses are not included in this task.

- Integration of EIMS with other City systems (i.e., SCADA, CMMS, etc.) is not included in this task. Placeholder links to other systems will be included based on the standard EIMS section templates developed for the RWRP.
- City staff will provide one, conformed version of comments to Consultant for the EIMS content review.
- Deliverables will be provided in electronic format only. For review purposes during development, City staff will be provided access to the EIMS on a secure Internet web site.

The City may elect to further expand the scope of services under this task to incorporate integration of EIMS with other City systems (i.e., SCADA, CMMS, etc.). Such scope of service expansion will be subject to City and Consultant negotiating a mutually agreeable scope and fee, and approval by the City Council, if required.

Part 2 – ENVIRONMENTAL SERVICES

The Consultant shall prepare an Environmental Assessment (EA) per CEQA guidelines for Lead Agencies. The City anticipates the preparation of an Initial Study (IS) resulting in a Negative Declaration (ND) or Mitigated Negative Declaration (MND). Should the IS result in recommendation for an Environmental Impact Report (EIR), the Consultant should be prepared to address any related tasks and provide a separate cost estimate for this work. The Consultant will coordinate and pay for advertisements and public notifications as required for CEQA preparation and applicable community meetings. The Consultant will coordinate with and send appropriate documents to the State Clearinghouse and applicable state agencies.

General tasks include, but are not limited to:

- Conduct a kick-off meeting with City staff to develop the project description.
- Prepare and advertise Notice of Preparation, conduct Initial Study, coordinate with applicable local, state, and federal agencies and other stakeholders as needed.
- Conduct field investigations, including but not limited to biological, cultural, traffic and others as applicable.
- Prepare Admin Draft IS and resulting environmental document and deliver to City for internal review and comment, incorporate City comments as appropriate.
- Prepare environmental documents for public and stakeholder review and comment, advertise, and circulate draft documents for public review and comment, prepare responses to public, agency, and stakeholder comments, prepare public hearing materials.
- Prepare Final IS and resulting environmental documents consistent with CEQA

requirements and guidelines.

- Conduct monthly update meetings with City staff as well as meetings to present Admin Draft documents.
- Provide monthly schedule and budget updates
- Project management as needed throughout the Project to support various related tasks.

Minimum deliverables summary:

- Kick-off meeting agenda and meeting minutes.
- Monthly meetings, monthly schedule updates, and monthly detailed billing by task.
- Six (6) hard-copies and two electronic files (PDF and MSWord) of the assembled Admin Draft IS Report.
- Fifteen (15) hard-copies and two electronic files (PDF and MSWord) of the assembled Public Review Draft IS Report.
- Six (6) hard-copies and two electronic files (PDF and MSWord) of environmental documentation related to IS, including Notice of Intent (NOI) to adopt ND/MND, Notice of Completion (NOC) for the State Clearinghouse, and Notice of Determination (NOD).
- All documents for public review should be submitted in an electronic format compliant with the Americans with Disabilities Act (ADA). Per City Administrative Order 8-16, "Documents must be provided as accessible PDFs or in another accessible format. Accessible PDFs are PDF documents created so that they are not read solely as an image by assistive technology and screen readers. This is usually achieved using tags, or a structured, textual representation of the PDF that is presented to screen readers but have no visible effect on the PDF file."
- One round of consolidated comments from the City per each stage of the document.
- One-person site visits to conduct biological and cultural resources surveys. No protocol-level surveys will be conducted.
- The scope of work does not include collection of field data for a traffic impact or noise study.
- No subsurface exploratory surveys will be required for the assessment of archaeological resources.
- Prepare responses for up to 6 comment letters, no more than 2-pages per response to comment.
- Any delays in receiving information for the project description, project information or site access are likely to result in delays in completing the environmental document.

- Any costs associated with filing fees will be borne by the City, i.e. California Department of Fish & Wildlife for its review, Fresno County public noticing, and the Fresno Bee for public notice.

Part 3 – STRUVITE STUDY

Struvite has been a re-occurring problem at the RWRF and Struvite removal is a critical part of the ongoing plant maintenance routine. Struvite scale occurs in pipelines, belts, centrifuges, pumps and digester units. Effective solutions for Struvite removal are needed to allow for plant operating efficiently and cost-effectively.

Deliverables:

Technical Memorandum to identify the problem and develop a system for control of the struvite at the RWRF (electronic files in PDF).

**CAROLLO ENGINEERS, INC.
FEE SCHEDULE**

**As of January 1, 2022
California**

	<u>Hourly Rate</u>
Engineers/Scientists	
Assistant Professional	\$200.00
Professional	245.00
Project Professional	290.00
Lead Project Professional	311.00
Senior Professional	332.00
Technicians	
Technicians	151.00
Senior Technicians	210.00
Support Staff	
Document Processing / Clerical	134.00
Project Equipment Communication Expense (PECE) Per DL Hour	13.00
Other Direct Expenses	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2022	\$.585 per mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.

EXHIBIT B

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno (City) and Carollo Engineers, Inc., (Consultant)

Project Management and Engineering Design Services for the Sidestream Treatment System at the Fresno-Clovis Regional Wastewater Reclamation Facility

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
2. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Professional Liability (Errors and Omissions) insurance appropriate to the Consultant's profession.

MINIMUM LIMITS OF INSURANCE

The Consultant, or any party the Consultant subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to the City, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

1. COMMERCIAL GENERAL LIABILITY:

- (i) \$1,000,000 per occurrence for bodily injury and property damage;
- (ii) \$1,000,000 per occurrence for personal and advertising injury;
- (iii) \$2,000,000 aggregate for products and completed operations; and,
- (iv) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

2. **COMMERCIAL AUTOMOBILE LIABILITY:**

\$1,000,000 per accident for bodily injury and property damage.

3. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.

4. **EMPLOYER'S LIABILITY:**

- (i) \$1,000,000 each accident for bodily injury;
- (ii) \$1,000,000 disease each employee; and,
- (iii) \$1,000,000 disease policy limit.

5. **PROFESSIONAL LIABILITY** (Errors and Omissions):

- (i) \$1,000,000 per claim/occurrence; and,
- (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event the Consultant purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the City, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

The Consultant shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and the Consultant shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the City's Risk Manager or designee. At the option of the City's Risk Manager or designee, either:

- (i) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees, agents, and volunteers; or
- (ii) The Consultant shall provide a financial guarantee, satisfactory to the City's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall the City be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

- 1. The City, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. The Consultant shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

2. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
3. For any claims relating to this Agreement, the Consultant's insurance coverage shall be primary insurance with respect to the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not contribute with it. The Consultant shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: the Consultant and its insurer shall waive any right of subrogation against the City, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

1. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by the Consultant.
2. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five-year discovery period.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by the Consultant, the Consultant must purchase "extended reporting" coverage for a minimum of five years completion of the Agreement work or termination of the Agreement, whichever occurs first.
4. A copy of the claims reporting requirements must be submitted to the City for review.
5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty calendar days' written notice by certified mail, return receipt requested, has been given to the City. The Consultant is also responsible for providing written notice to the City under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, the Consultant shall

furnish the City with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for the City, the Consultant shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by the Consultant shall not be deemed to release or diminish the liability of the Consultant, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by the Consultant. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of the Consultant, its principals, officers, agents, employees, persons under the supervision of the Consultant, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If the Consultant subcontracts any or all of the services to be performed under this Agreement, the Consultant shall require, at the discretion of the City's Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by the City Risk Manager or designee. If no Side Agreement is required, the Consultant will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

The Consultant shall furnish the City with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the City's Risk Manager or its designee prior to the City's execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of the City, the Consultant shall immediately furnish the City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

EXHIBIT C

DISCLOSURE OF CONFLICT OF INTEREST

Project Management and Engineering Design Services for the Sidestream Treatment System at the Fresno-Clovis Regional Wastewater Reclamation Facility

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Do you represent any firm, organization, or person who is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Are you or any of your principals, managers, or professionals, owners or investors in a business which does business with the City of Fresno, or in a business which is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Are you or any of your principals, managers, or professionals, related by blood or marriage to any City of Fresno employee who has any significant role in the subject matter of this service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do you or any of your subcontractors have, or expect to have, any interest, direct or indirect, in any other contract in connection with this Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

Since the time of our proposal submittal, we have since been made aware of litigation filed on the City's behalf by the City's workers compensation carrier against Carollo and a construction contractor related to the malfunction of a piece of equipment installed by the construction contractor on a prior project. Because the City is not driving that litigation and has made no allegations that we performed negligently, we were not made aware of this litigation until our attorney reviewed this form as part of the execution on this contract.

☐ Additional page(s) attached.

DocuSigned by:


Signature

5/13/2022

Date

Paul Amico

(Name)

Paul Amico

(Company)

Carollo Engineers, Inc

(Address)

1401 Fulton St, Suite 802

Fresno, CA 93721

(City, State Zip)