City of FRESNO **REPORT TO THE CITY COUNCIL**

AGENDA ITEM NO. 1 C
COUNCIL MEETING 12/08/11
APPROVED BY
DEPARTMENT DIRECTOR
CITY MANAGER

December 8, 2011

FROM: PATRICK N. WIEMILLER, Director
Department of Public Utilities

BY: STEPHEN A. HOGG, Assistant Director
Department of Public Utilities – Wastewater Management Division

SUBJECT: APPROVE A CONSULTANT AGREEMENT IN THE AMOUNT OF $183,133 WITH CAROLLO ENGINEERS, INC., A DELAWARE CORPORATION OF WALNUT CREEK, CALIFORNIA, FOR PROFESSIONAL ENGINEERING SERVICES TO DESIGN A REPLACEMENT DISINFECTION SYSTEM AT THE NORTH FRESNO WASTEWATER RECLAMATION FACILITY (COUNCIL DISTRICT NO. 6)

RECOMMENDATION

Staff recommends approval of a consultant service agreement with Carollo Engineers, Inc a Delaware corporation of Walnut Creek, in the amount of $183,133 for professional engineering services for the design of a Replacement Disinfection System at the North Fresno Wastewater Reclamation Facility (NFWRF) and authorize the Director, or his designee, to sign the agreement on behalf of the city.

EXECUTIVE SUMMARY

The Department of Public Utilities Wastewater Management Division is seeking to award a consultant service agreement to Carollo Engineers, for the design of a Replacement Disinfection System at the NFWRF. The existing disinfection system does not reliability operate as originally designed. In order to meet regulatory discharge requirements a new disinfection system is required. Staff is seeking to award a contract in the amount of $183,133 to Carollo Engineers, of Walnut Creek, California.

BACKGROUND

The NFWRF was originally designed and built by a private partnership to provide sewer collection and treatment capacity for the Copper River Ranch area. Upon completion of construction of the facility in 2009, ownership was transferred to the City of Fresno. The NFWRF was designed for an average influent of 0.71 million gallons per day (mgd), with a maximum daily flow of 1.07 mgd. The treatment plant treats mainly residential sewage and thus experiences extreme diurnal differences in flow commonly associated with residences. In addition to these large variations in flow the depressed housing market severely impacted the length of time it will take to reach the current design capacity. The existing disinfection system at the NFWRF uses chlorine and was designed to operate at a constant stable flow near the full rated capacity.

Treated water discharged from the facility is continually monitored for compliance. When the flow from the NFWRF meets discharge requirements the recycled water is used for irrigation of the Copper River Golf Course and other future recycled water customers. This is the only long term alternative for the disposal of treated effluent from the area currently in place. In the short term, when the discharges do not meet requirements, the plant outflow must be pumped one mile into the sewer collection system flowing to the Regional Wastewater Reclamation Facility (RWRF). The sewer collection system feeding the RWRF is not

sized properly to handle the projected flows when the area is build out. Therefore, it is critical the facility disinfection system be replaced with one capable of attaining constant compliance. Staff working along with the equipment manufacturer's representatives have been unsuccessful in bringing the system into consistent compliance.

The new disinfection system will replace the existing system with one capable of compensating for the low flow and diurnal variances. A replacement system utilizing either ultraviolet light or ozone rather than chlorine will ensure the reliability to meet the discharge requirements on a consistent basis and supply safe recycled water to the City's customers.

Following Fresno Municipal Code Chapter 4 Article 1 and Administrative Order 6-19, the DPU notified over 70 consulting firms requesting a statement of qualifications. In addition, the Purchasing Division posted the request on the City's "Bids On-Line" website. The Department received five responses and based upon their Statement of Qualification, three firms were interviewed, two of which were asked for level of effort and scopes for the project. Carollo was chosen as the firm with the most beneficial scope and level of effort for the City. Staff negotiated a professional services fee of $183,133 for Professional Engineering services.

The Council may award a contract in the amount of $183,133 to Carollo Engineers, a Delaware Corporation, of Walnut Creek, California. If the contract is not awarded, the request for qualifications will advertise again as directed by the City Council, resulting in approximately a 120-day delay in the project.

The City Attorney's office has approved the professional services agreement as to form.

ENVIRONMENTAL FINDINGS

By the definition provided in the California Environmental Quality Act Guidelines Section 15378 the award of this contract does not qualify as a "project" and is therefore exempt from the California Environmental Quality Act requirements.

FISCAL IMPACT

This project is identified in the five year capital improvement plan. The funds for the design of this project were budgeted and are available in the 2012 Sewer Enterprise Fund No. 40501.

Attachments:
- Vicinity Map
- Contract
- Fiscal Impact

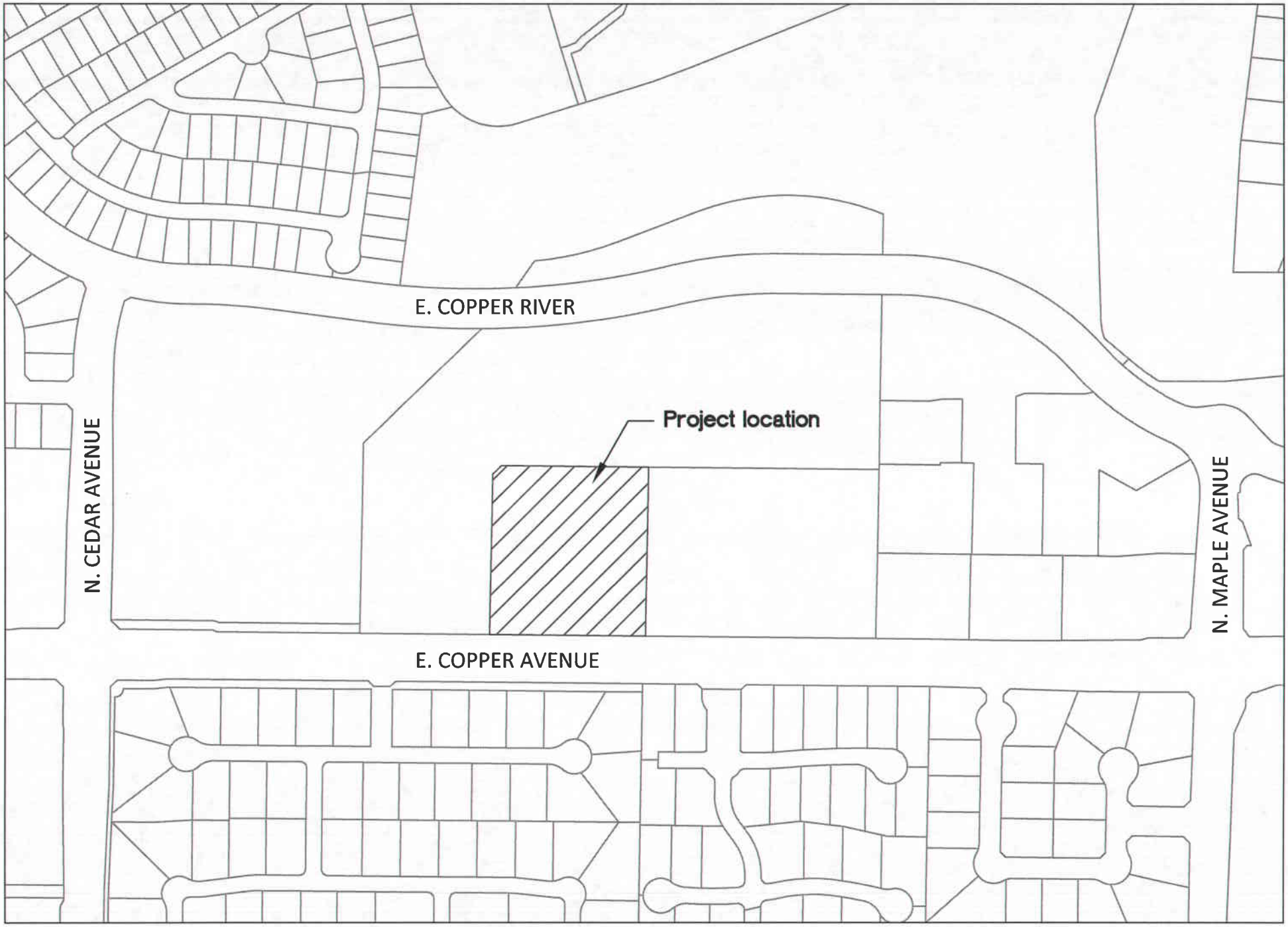
E. COPPER RIVER
Project location
N. CEDAR AVENUE
N. MAPLE AVENUE
E. COPPER AVENUE

EXHIBIT A

AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES

THIS AGREEMENT is made and entered into effective the ___ day of December , 2011, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and CAROLLO ENGINEERS, Inc., a Delaware Corporation (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional engineering services for the design of plans and general construction contract documents for Replacement Disinfection System at the North Fresno Wastewater Reclamation Facility, hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing technical and expert services as a Professional Engineer and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, 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 CITY by its Director of Public Utilities (hereinafter referred to as "Director") or his/her 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 and Completion Schedule. CONSULTANT shall perform the services described herein and in **Exhibit A** to complete the Project more fully described in **Exhibit A**, and this shall include all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**. The services of CONSULTANT shall consist of five Parts as described below. A separate Notice to Proceed will be issued for each of the aforementioned Parts. By entry into this Agreement and upon CITY'S issuance of a written "Notice to Proceed," CITY contracts for the services in Part One. CONSULTANT shall not perform any other Part of the Agreement, and this Agreement shall not be a contract for any other Part, until further performance is authorized by CITY'S issuance of a written "Notice to Proceed." It shall, however, remain CONSULTANT'S offer to perform all remaining parts described herein. In the event CONSULTANT performs services without CITY'S prior written authorization, CONSULTANT will not be entitled to compensation for such services.

(a) Part One. Schematic Design Phase.

(1) CONSULTANT shall review the description of the Project set forth in **Exhibit A** and consult with designated representatives of CITY to ascertain the requirements of the Project.

(2) CONSULTANT shall complete a topographic survey in accordance with the detailed minimum survey requirements set forth in **Exhibit A**. The topographic survey shall include sufficient detail for the design of the Project, to establish pertinent right-of-way and property lines, and as necessary to obtain the acceptance of

CITY. CONSULTANT shall provide CITY with an electronic file of the topographic survey in the following format:
Autocad.

(3) CONSULTANT shall conduct studies and investigations as necessary to confirm requirements of design including, but not limited to, (i) consulting with the various utility agencies, and (ii) obtaining all information and data from the respective responsible CITY department/division that is available in CITY'S records and is required by CONSULTANT in connection with the consulting services including, but not limited to, maps, reports, information, restrictions and easements.

(4) CONSULTANT shall provide a preliminary evaluation of the Project taking into consideration CITY'S estimate of the cost of construction ("Construction Budget") of $1,000,000.00, including alternative approaches to design and construction of the Project.

(5) Based upon the mutually agreed upon Project requirements and any adjustments authorized by CITY in the Construction Budget, CONSULTANT shall design and prepare schematic design drawings and other documents for review, modification, if required, and acceptance by CITY staff sufficient to show the concept and scope of the proposed Project and the scale and relationship of Project components.

(6) CONSULTANT shall submit a preliminary estimate of construction cost for review and acceptance by CITY. As used herein, "construction cost" means the cost of construction under the general construction contract and does not include CONSULTANT'S compensation as herein provided. Such estimate shall include, and shall separately state, the cost of any add or deduct alternatives, the cost of any work which may be let on a segregated bid basis and any equipment or fixtures which may be incorporated in or excluded from the general construction contract as may be necessary to stay within the Construction Budget.

(7) CONSULTANT shall make as many submittals as may be necessary or desirable to obtain the acceptance by CITY and shall assist CITY in applying for and obtaining from applicable public agencies any approval permit, or waiver required by law, which assistance shall include, but not be limited to, making Project information available to CITY.

(8) CONSULTANT may not rely upon any as-builts provided by CITY, but shall investigate the existing conditions and ascertain the adequacy of such as-builts for CONSULTANT'S design. CONSULTANT shall bring to CITY'S attention any discrepancies in the as-builts that are discovered by CONSULTANT. CITY makes no representations regarding any as-builts.

(9) Services shall be undertaken and completed in a sequence assuring expeditious completion. All services shall be rendered and deliverables submitted within 90 calendar days from the issuance of a Notice to Proceed for this Part unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within 21 calendar days from receipt of CITY'S comments unless an extension of time is approved in writing by the Director.

(b) Part Two. Design Development Phase. After review and acceptance of the schematic design phase and issuance of a written Notice to Proceed with this Part Two:

(1) Based upon the accepted schematic design documents and the Construction Budget, including authorized revisions thereto, CONSULTANT shall prepare for review and acceptance by CITY the design development documents consisting of drawings and other documents to fix and describe the size and character of the Project as necessary to show treatment of significant details. In addition, CONSULTANT shall provide outline specifications of the work as to kinds of materials, systems, and other such design elements as may be required. Such design development documents and specifications shall be subject to review and acceptance by CITY.

(2) CONSULTANT shall submit a revised estimate of construction cost for review and acceptance by CITY. The revised estimate shall include, but shall separately state, the cost of any add or deduct alternates, any work which may be let on a segregated bid basis, and any furnishings, equipment or fixtures which may be incorporated in or excluded from the general construction contract as may be necessary to stay within the Construction Budget, including authorized revisions thereto.

(3) In the event that the revised estimate of construction cost exceeds the preliminary estimate of construction cost previously accepted, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishing, equipment or fixtures which was identified in Part 1 as that which may be excluded from the general construction contract, CITY shall have the option of accepting or rejecting the revised estimate and CONSULTANT shall, at no additional cost to CITY, make such design changes as may be necessary to reduce the revised estimate so that it shall not exceed the preliminary estimate of construction cost previously accepted by CITY. CITY shall not increase the scope of the Project except by modification of this Agreement which shall include an agreed upon increase in CONSULTANT'S compensation.

(4) CONSULTANT shall make as many submittals as may be necessary or desirable to obtain the acceptance by CITY and shall assist CITY in applying for and obtaining from applicable public agencies any approval, permit, or waiver required by law, which assistance shall include, but not be limited to, making Project information available to CITY.

(5) Services shall be undertaken and completed in a sequence assuring expeditious completion. All services shall be rendered and deliverables submitted within 45 calendar days from the issuance of a Notice to Proceed for this Part unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within 14 calendar days from receipt of CITY'S comments unless an extension of time is approved in writing by the Director.

(c) Part Three. Construction Document Phase. After review and acceptance of the design development phase and issuance of a written Notice to Proceed with this Part Three:

(1) CONSULTANT shall prepare from the accepted design development documents, detailed plans and specifications setting forth the complete work to be done, and the materials, workmanship, finishes and equipment, fixtures, and site work required. CONSULTANT shall also prepare necessary bidding information, general and special conditions of the general construction contract, technical specifications of the general construction contract, and the bid proposal and general construction contract forms. Such documents shall be subject to the review and acceptance by CITY. CONSULTANT shall cooperate with, assist and be responsive to CITY'S Purchasing Manager in preparation of all documents including, without limitation, slip-sheeting final documents for printing when requested. CITY'S Standard Specifications must be used by CONSULTANT where possible. Final drawings shall be drawn, printed or reproduced by a process providing a permanent record in black on vellum, tracing cloth, polyester base film, or high quality bond copy. Bid, general conditions, contract and bond document forms or formats regularly used by CITY shall be used by CONSULTANT unless the Director determines they would be impractical for this Project. CONSULTANT shall be responsible for assuring that the special conditions, technical specifications and any other documents prepared by CONSULTANT are consistent with any documents regularly used by CITY that are used for this Project.

(2) Upon request of CITY, CONSULTANT shall provide the calculations used to determine the general construction contract quantities; and structural calculations for the purpose of obtaining any building permits.

(3) CONSULTANT shall make as many submittals as may be necessary or desirable to obtain the acceptance by CITY and shall assist CITY in applying for and obtaining from applicable public agencies any approval, permit, report, statement, or waiver required by law, which assistance shall include, but not be limited to, making Project information available to CITY.

(4) CONSULTANT shall provide CITY with 3 sets of completed plans and 2 sets of completed specifications for review and final acceptance by CITY. Should the plans and specifications as submitted by CONSULTANT not be accepted by CITY, CONSULTANT shall revise the plans and specifications as needed to obtain final acceptance at no additional cost to CITY.

(5) After acceptance of final corrections, if any, CONSULTANT shall provide CITY with one set of accepted reproducible tracings and bid documents for the Project. In addition, CONSULTANT shall provide CITY with one complete set of CAD/System disk files of drawings and complete disk files of specifications in the following format: Autocad.

(6) CONSULTANT shall submit a final estimate of construction cost for review and acceptance by CITY. Such estimate shall be calculated as of the date all general construction contract documents are delivered to CITY in final form ready for reproduction and advertising. Such estimate shall include, but shall separately state, the cost of any add or deduct alternates, any work which may be let on a segregated basis, and any equipment, or fixtures which may be incorporated in or excluded from the general construction contract.

(7) In the event that the final estimate of construction cost exceeds the revised estimate of construction cost previously accepted, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishings, equipment or fixtures which was identified in the final revised estimate in Part 2 as that which may be excluded from the general construction contract, CITY shall have the option of accepting or rejecting the final estimate. If CITY elects to reject the final estimate, CONSULTANT shall at no additional cost to CITY, make such design changes as may be necessary to reduce the final estimate so that it shall not exceed the revised estimate of construction cost previously accepted by CITY.

(8) Services shall be undertaken and completed in a sequence assuring expeditious completion. All services shall be rendered and deliverables submitted within 75 calendar days from the issuance of a Notice to Proceed for this Part unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within 14 calendar days from receipt of CITY'S comments unless an extension of time is approved in writing by the Director.

(d) Part Four. Bidding Phase. After review and acceptance of the construction document phase and if CITY elects to proceed to bid, which shall constitute a written Notice to Proceed with this Part Four:

(1) CONSULTANT shall assist CITY in obtaining bids. CONSULTANT shall not communicate with potential bidders regarding this Project without the express prior written authorization of CITY'S Purchasing Manager.

(2) Upon request of CITY, CONSULTANT shall expeditiously draft addendum as determined by CITY to be reasonable or necessary for the bidding process.

(3) If the lowest responsible bid received for the general construction contract exceeds by 10% or more the final estimate of construction cost previously accepted by CITY, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishings, equipment or fixtures which are excluded from the general construction contract, CONSULTANT shall, within 14 days of any request by CITY, revise the plans and specifications as may be necessary to stay within 10% of such final estimate of construction cost, at no additional cost to CITY provided such bid is received within 180 calendar days after completion of services in Section 1(c) of this Agreement. CONSULTANT shall also submit such revised plans and specifications, together with a new final estimate of construction cost, to CITY for review and acceptance. This procedure, using the latest accepted final estimate of construction cost, shall, upon written notice to CONSULTANT from the Director, be repeated until an acceptable bid is received that does not exceed the accepted final estimate of construction cost by more that 10%.

(e) Part Five. Construction Phase and General Construction Contract Administration. The construction phase will begin with the award of the general construction contract, which shall constitute a written Notice to Proceed with this Part Five, and will terminate when a Notice of Completion is filed. Upon award of a general construction contract for the Project and under the direction of the Director through CITY'S designated Construction Manager for the Project:

(1) CONSULTANT shall attend the pre-construction conference and, if called upon by CITY, act on CITY'S behalf in discussing the various aspects of the construction phase.

(2) CONSULTANT shall review and recommend in writing to CITY acceptance or non-acceptance of shop drawings, equipment and material submittals of the general construction contractor as required by the general construction contract and applicable laws and regulations in a timely manner. The period for CONSULTANT review shall be as specified in the general construction contract, except if such period is not so specified, the period shall be as determined in the pre-construction conference as mutually agreed upon by CITY, CONSULTANT and the general construction contractor.

(3) CONSULTANT shall, at intervals appropriate to the state of construction, familiarize itself with the progress and quality of the work and determine in general if the work is proceeding in accordance with the general construction contract documents, and keep CITY informed of the progress of the work. In the event that CONSULTANT'S visit to the site results in the discovery of any defect or deficiencies in the work of the general construction contractor, CONSULTANT shall immediately advise CITY and document, in writing, the work CONSULTANT deems substandard, and make recommendations where appropriate to reject any work not conforming to the intended design or specifications. Based on CONSULTANT'S best knowledge, information and belief, CONSULTANT shall provide CITY a general written assurance that the work covered by a payment application meets the standards in the general construction contract. As to technical aspects, CONSULTANT shall provide a written judgment of the acceptability of the work for payment applications and final acceptance, subject to CITY'S right to overrule CONSULTANT.

(4) Upon written request by CITY, CONSULTANT shall render interpretations of the general construction contract documents necessary for the proper execution or progress of the work.

(5) Upon written request by CITY, CONSULTANT shall render written recommendations on change orders, claims, disputes or other questions arising out of the general construction contract, in a timely manner. Recommendations by CONSULTANT in favor of a change order that is consequently accepted by CITY shall constitute approval by CONSULTANT who shall then approve the change order in writing. CONSULTANT shall not unreasonably withhold written approval in the event CITY accepts a change order that CONSULTANT recommended to be rejected. In the event of any technical disputes, CONSULTANT shall provide CITY with CONSULTANT'S written interpretation of the contract documents. The period for CONSULTANT review shall be as specified in the general construction contract, except if such period is not so specified, the period shall be as determined in the pre-construction conference as mutually agreed upon by CITY, CONSULTANT and the general construction contractor. If CITY, CONSULTANT and the respective general construction contractor are unable to mutually agree on such period for CONSULTANT review, then CITY will make the determination and that determination will be final.

(6) Upon written request by CITY, CONSULTANT shall provide such design and specification services as may be requested by CITY to implement change

orders necessary for clarification or interpretation of the general construction contract documents or which may have resulted from errors or omissions by CONSULTANT.

(7) Where change orders arise as a result of an increase in the scope of work or are due to unforeseeable conditions, the parties may modify this Agreement, which modification shall include an agreed upon increase in CONSULTANT'S compensation.

(8) Upon written request of CITY, CONSULTANT shall assist CITY in the preparation of Progress Payment Estimates and other related construction reports.

(9) CONSULTANT shall provide CITY with two sets of original as-grade plans wet-stamped and signed by the CONSULTANT'S Engineer of Record for the Project submitted for final approval by the CITY's Building and Safety Services Division of the Development and Resource Management Department.

(10) CONSULTANT shall prepare Record Drawings by updating the accepted general construction documents in Part 3 to reflect all changes or deviations that occurred during construction as reflected on or from each of the following: (i) the general construction contractor provided red-lined plans, (ii) those furnished by the CITY, (iii) CONSULTANT provided Request for Information responses, and (iv) any CONSULTANT bulletins, amendments or clarifications. CONSULTANT shall provide CITY with one set of vellum Record Drawings for the Project within 30 calendar days from receipt of red-lined field markups unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within 14 calendar days from receipt of CITY comments unless an extension of time is approved in writing by the Director. In addition, CONSULTANT shall provide CITY with one complete set of CAD/System disk files of Record Drawings in the following format: Autocad.

2. CITY'S responsibilities. CITY will:

(a) Provide, upon request and cooperation of CONSULTANT, access to, and make all provisions necessary to, enter upon public or private lands as required for CONSULTANT to perform such services and inspections as are required in development of the Project; provided, however, if CITY is unable to obtain access to enter upon public or private lands, CONSULTANT shall not be relieved from performing its services as to those public and private lands that are accessible.

(b) Manage and be responsible for all negotiations with owners in connection with land or easement acquisition and provide all required title reports and appraisals.

(c) With the exception of preparing correspondence required for design, hold all required special meetings, serve all public and private notices, receive and act upon all protests, and perform all services customarily performed by owners as are necessary for the orderly progress of the work and the successful completion of the Project, and pay all costs incidental thereto.

(d) Select the testing laboratory and pay the cost of borings, samplings, and other work involved in soils testing during construction.

(e) Conduct onsite inspection during construction to check quality and quantity of work as conditions warrant and be responsible for assuring that the general construction contractor carries out all construction work in accordance with the plans and specifications. However, this does not release CONSULTANT from its responsibility to make periodic site visits under Section 1(e) for the purpose of observing the work to determine its general conformity with the plans and specifications and reporting its findings to CITY.

(f) Prepare all change orders during construction in cooperation with CONSULTANT.

(g) Prepare all Progress Payment Estimates in cooperation with CONSULTANT following its general assurance that the work covered by a payment application meets the standards in the general construction contract documents based upon CONSULTANT'S best knowledge, information and belief.

(h) Pay, or cause to be paid, plan check fees, conditional use permit fees and site plan review fees.

(i) Arrange for and pay, or cause to be paid, any fees associated with Environmental Impact Reports or Statements.

(j) Give reasonably prompt consideration to all matters submitted by CONSULTANT for acceptance to the end that there will be no substantial delays in CONSULTANT'S program of work. For an acceptance, approval, authorization, a request or any direction to CONSULTANT to be binding upon CITY under the terms of this Agreement, such acceptance, approval, authorization, request or direction must be in writing, duly authorized by CITY and signed on behalf of CITY by the Director.

3. Compensation.

(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee of $183,166.00. Such fee includes all expenses incurred by CONSULTANT in performance of the services.

(b) Detailed statements shall be rendered monthly and will be payable in the normal course of CITY business. Such statements shall be for an amount no greater than that attributable to the Part upon which CONSULTANT is then engaged as provided in Section 3(c) below.

(c) For purposes of determining the division of the total compensation to CONSULTANT as provided in Section 3(a) above, or should performance of any succeeding Part not be authorized by CITY as provided in Section 1 of this Agreement, it is agreed that the total compensation shall be allocated to the five Parts of CONSULTANT'S performance as follows: Part 1 - 40%, Part 2 - 15%, Part 3 – 15%, Part 4 – 2.5% and Part 5 – 27.5%. Prior to the award of a general construction contract for the Project, or should such contract not be awarded, the approved Parts as provided above shall be utilized for purposes of determining the fee due to CONSULTANT.

(d) 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 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. CONSULTANT shall not be entitled to any additional compensation if services are performed prior to a signed written amendment. Subsequent to the date of completion of Part Three, changes due to Code revisions or enactments adopted after such date shall constitute additional work subject to this Section 3(d).

4. Termination, Remedies, Force Majeure, and Consolidation of Disputes.

(a) This Agreement shall terminate without any liability of CITY to CONSULTANT upon the earlier of: (i) CONSULTANT'S filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against CONSULTANT; (ii) 7 calendar days prior written notice with or without cause by CITY to CONSULTANT; (iii) 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, CONSULTANT shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to CITY any and all unearned payments and all properties and materials in the possession of CONSULTANT that are owned by CITY. Subject to the terms of this Agreement, CONSULTANT shall be paid compensation for services satisfactorily performed prior to the effective date of termination. 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 CONSULTANT to satisfactorily perform in accordance with the terms of this Agreement, CITY may withhold an amount that would otherwise be payable as an offset to, but not in excess of, CITY'S damages caused by such failure. In no event shall any payment by CITY pursuant to this Agreement constitute a waiver by CITY of any breach of this Agreement which may then exist on the part of CONSULTANT, nor shall such payment impair or prejudice any remedy available to CITY with respect to the breach.

(d) Upon any breach of this Agreement by CONSULTANT, 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 CITY improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) CONSULTANT shall provide CITY with adequate written assurances of future performance, upon the request of the Director or his/her designee, in the event CONSULTANT fails to comply with any terms or conditions of this Agreement.

(f) CONSULTANT shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of CONSULTANT and without its fault or negligence such as, acts of God or the public enemy, acts of CITY in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. CONSULTANT shall notify the Director or his/her designee 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 the Director or his/her designee of the cessation of such occurrence.

(g) CONSULTANT agrees that, notwithstanding any contrary provision in this Agreement, any dispute arising from or relating to this Agreement (including, without limitation, disputes based on contract, tort, equity or statute) may, at CITY'S option, be joined and consolidated with any other dispute or disputes arising from or relating to the Project so that all disputes arising from or relating to the Project may be resolved in a single proceeding. CONSULTANT hereby specifically waives any objection it may otherwise have to such joinder and consolidation and specifically consents to mediation, arbitration or any other dispute resolution mechanism, forum or proceeding necessary to effectuate the joinder and consolidation contemplated by this provision.

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

(a) Any reports, information, or other data prepared or assembled by CONSULTANT pursuant to this Agreement shall not be made available to any individual or organization by CONSULTANT without the prior written approval of CITY. During the term of this Agreement, and thereafter, CONSULTANT shall not, without the prior written consent of 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 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 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 CONSULTANT pursuant to this Agreement are the property of CITY at the time of preparation and shall be turned over to CITY upon expiration or termination of the Agreement or default by CONSULTANT. CONSULTANT grants CITY a copyright license to use such drawings and writings. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein. CITY may modify the design including any drawings or writings. Any use by 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 CONSULTANT will be at CITY'S sole risk and without liability or legal exposure to CONSULTANT. CONSULTANT may keep a copy of all drawings and specifications for its sole and exclusive use.

(c) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, 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 CONSULTANT represents to CITY that 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, CITY relies upon the skill of CONSULTANT and any subcontractors to do and perform such services in a skillful manner and CONSULTANT agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such services by CITY shall not operate as a release of CONSULTANT or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law, CONSULTANT shall indemnify, hold harmless and defend 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 CONSULTANT, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend 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, CONSULTANT shall pay for and maintain in full force and effect all insurance as required in **Exhibit B** or as may be authorized in writing by CITY'S Risk Manager or his/her designee at any time and in his/her sole discretion.

(b) If at any time during the life of the Agreement or any extension, CONSULTANT or any of its subcontractors 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 CONSULTANT shall be withheld until notice is received by 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 CITY. Any failure to maintain the required insurance shall be sufficient cause for CITY to terminate this Agreement. No action taken by CITY pursuant to this section shall in any way relieve CONSULTANT of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by 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 CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify 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 CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) Upon request of CITY, CONSULTANT shall immediately furnish 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.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide insurance protection in favor of 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 CONSULTANT and CITY prior to the commencement of any services by the subcontractor.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to CITY'S execution of this Agreement, 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, CONSULTANT shall have the obligation and duty to immediately notify CITY in writing of any change to the information provided by CONSULTANT in such statement.

(b) 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 CITY, CONSULTANT shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, CONSULTANT and the respective subcontractor(s) are in full compliance with all laws and regulations. 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, CONSULTANT shall immediately notify CITY of these facts in writing.

(c) In performing the work or services to be provided hereunder, CONSULTANT shall not employ or retain the services of any person while such person either is employed by 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) 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 CONSULTANT, nor any of 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. 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 CONSULTANT should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, 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 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, CONSULTANT at its sole cost and expense shall:

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

(ii) Immediately contact 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.

(iii) Cooperate with and demonstrate to the satisfaction of 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 CITY within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Director or his/her designee.

(b) Records of CONSULTANT'S expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to 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 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 CITY until such action is resolved, or until the end of said time period whichever shall later occur. If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, 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 CITY, CONSULTANT shall have provided evidence to CITY that CONSULTANT is licensed to perform the services called for by this Agreement (or that no license is required). If CONSULTANT should subcontract all or any

portion of the work or services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide evidence to CITY that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

(d) CONSULTANT'S services pursuant to this Agreement shall be provided under the supervision of Andrew T. Salveson, and he/she shall not assign another to supervise CONSULTANT'S performance of this Agreement without the prior written approval of the Director.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, 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, CONSULTANT agrees as follows:

(a) 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) 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. 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 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. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of 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) 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 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 CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, 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, CONSULTANT is acting solely as an independent contractor. Neither CONSULTANT, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of CITY for any purpose. CITY shall have no right to control or supervise or direct the manner or method by which CONSULTANT shall perform its work and functions. However, CITY shall retain the right to administer this Agreement so as to verify that 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 CONSULTANT and CITY. CONSULTANT shall have no authority to bind CITY absent CITY'S express written consent. Except to the extent otherwise provided in this Agreement, CONSULTANT shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, CONSULTANT and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to CITY employees. 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, CONSULTANT shall be solely responsible, indemnify, defend and save CITY harmless from all matters relating to employment and tax withholding for and payment of 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 CITY employment benefits, entitlements, programs and/or funds offered employees of 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, CONSULTANT may be providing services to others unrelated to 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 CONSULTANT and there shall be no assignment by CONSULTANT of its rights or obligations under this Agreement without the prior written approval of the City Manager or his/her designee. Any attempted assignment by CONSULTANT, its successors or assigns, shall be null and void unless approved in writing by the City Manager or his/her designee.

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

17. Compliance With Law. In providing the services required under this Agreement, CONSULTANT shall at all times comply with all applicable laws of the United States, the State of California and 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 CITY and CONSULTANT.

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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: _____
Patrick N. Wiemiller, Director
Department of Public Utilities

ATTEST:
REBECCA E. KLISCH
City Clerk

By: _____
Deputy

No signature of City Attorney required. Standard Document #DPU 5.0 has been used without modification, as certified by the undersigned.

By: _____
Kevin L. Norgaard
Supervising Professional Engineer
Department of Public Utilities

REVIEWED BY:

_____
Stephen A. Hogg, Assistant Director
Department of Public Utilities

CAROLLO ENGINEERS, Inc,
a Delaware Corporation

By: _____

Name: Steve Swanback

Title: Vice President
[if corporation or LLC, Board Chair, Pres. or Vice Pres.]

By: _____

Name: Andrew Salveson

Title: Associate Vice President
[if corporation or LLC, CFO, Treasurer, Secretary or Assistant Secretary.]

Any Applicable Professional License:
Number: C37271
Name: Steve Swanback
Date of Issuance: 7/22/83

Addresses:

CITY:
City of Fresno
Attention: Kevin Norgaard, Supervising Professional Engineer
5607 West Jensen
Fresno, CA 93706
Phone: (559) 621-5297
FAX: (559) 498-1700

CONSULTANT:
Carollo Engineers, Inc
Attention: Steven Swanback, Principal
2700 Ygnacio Valley Road, Suite 300
Walnut Creek, Ca., 94598
Phone: (925) 932-1710
FAX: (925) 930-0208

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")**
Replacement Disinfection System at the NFWRF
PROJECT TITLE

TASK ORDER NO. 1

PROJECT BACKGROUND

The North Fresno Wastewater Reclamation Facility (NFWRF) was designed for a current average influent flow of 0.71 mgd, with a maximum daily flow of 1.07 mgd. The daily average flow may be increased by the addition of two additional SBRs to a total of 1.30 mgd in the future. The treatment plant treats mainly residential sewage and thus experiences extreme diurnal flow differences associated with these residential flows. In addition to these large variations in flow the depressed housing market has severely impacted the length of time it will take to reach the current design capacity.

As a direct result of the current low flow along with the diurnal flow variances, the existing chlorine disinfection system is not able to reliably function. The replacement system must be expandable to a maximum of 1.30 mgd. Carollo Engineers (Carollo) offers to provide engineering services including the preparation of Design-Bid-Build documents, support during bidding, and support during construction for a replacement disinfection system at the NFWRF. It is anticipated the replacement system will consist of an in-vessel UV system or ozonation.

ENGINEERING SERVICES

The objective of this task is to provide the City of Fresno (hereinafter referred to as "CITY") with a set of Contract Documents for bidding (including Plans and Specifications) for the Replacement Disinfection System Project (hereinafter referred to as "project"). Plans will include general, structural, civil, mechanical, electrical and instrumentation drawings. Specifications will include General Conditions, Special Conditions, and final Technical Specifications. The CITY's Standard Specifications used on previous construction projects at the NFWRF will be used. Specifications, Bid, and Contract Documents shall be reviewed by the CITY's legal counsel as to form.

Because the CITY has indicated the desire is to replace the existing disinfection technology with an alternative technology but has not selected the alternative technology Task 1 – Schematic Phase Design includes a life cycle cost analysis of alternative technologies. Based upon discussion with CITY staff the alternative technologies to be evaluated include: in-vessel UV disinfection and ozonation. Technologies that will not be evaluated include: chlorine gas or sodium hypochlorite disinfection, in-channel disinfection and pasteurization.

Understanding the CITY's desire to be involved in the decision making process of the alternative technology Task 1- Schematic Design Phase includes a WebEx meeting and a workshop with staff in addition to the effort required to develop preliminary plans and specifications.

Task 1 - Schematic (30 percent) Design Phase

Subtask 1.1 – Technology Selection and Life Cycle Cost Analysis

This task includes the following components:

- Evaluate flow records and existing plans to determine the best alternative which could be used to equalize flow and optimize the use of the alterative disinfection technology.
- Review the existing facilities to determine the modifications necessary to accommodate the alternative disinfections under consideration.
- Evaluate three in-vessel UV systems for potential implementation, including WEDECO LBX, Trojan UVFIT, and Aquionics InLine reactors. Depending upon the equalization results, parallel small flow reactors may be required along with the larger flow reactors. Evaluation will include estimates of construction and lifecycle costs.
- Evaluate the APTWater HiPOx system. Depending upon the equalization results, parallel small flow reactors may be required along with the larger flow reactors. Evaluation will include estimates of construction and lifecycle cost.
- Develop preliminary procurement strategy alternatives in sufficient detail to assist the CITY's decision making process including: sole source; equipment prepurchase through competitive bidding; equipment prepurchase through negotiations; and equipment prepurchase and contract reassignment.

Assumptions for Subtask 1.1:

- CITY will provide Carollo the existing record drawings in both pdf and AutoCAD format, past studies related to disinfection, and the historic water quality data including flow, UV Transmittance, etc.
- CITY will send the filtered wastewater samples to the laboratories to determine the UV and Ozone design dose. These tests will include collimated beam analysis, particle size distribution and bench-scale ozone demand/decay test.

Meeting for Subtask 1.1:

- Workshop 1 (via WebEx) with CITY staff to review the draft results of the flow equalization analysis and the impact on technology selection.
- Workshop 2 with CITY staff to review the draft results of the technology life-cycle cost analysis and discuss equipment procurement strategy. Results of the life cycle cost analysis will be provided three (3) days prior to the workshop in tabular form. Each technology (three in-vessel and one ozone technology) will be compared with and without flow equalization.

Deliverables for Subtask 1.1:

- Meeting notes and Decision and Action Log recording the alternative technology and procurement strategy selected.

Subtask 1.2 – Schematic Design (30 Percent) Submittal.

The Schematic Design documents will be developed in standard CITY title block drawing sheet format to a 30 percent level of design and will include preliminary cost estimate, preliminary layouts, preliminary schematics, preliminary P&IDs and control descriptions and a draft specification of key process equipment. Specific deliverables are listed below. Existing topographic information will be used for the project. No additional survey information will be used. Two (2) half size plan sets, one (1) full size plan set and two (2) copies of the specifications will be provided to the CITY.

Assumptions for Subtask 1.2:

- Carollo standard specification Divisions 1 thru 17 will be used.
- Carollo CAD standards will be used. Drawings will be prepared using AutoCAD Version 2006.
- Comments on the Schematic Design documents will be provided by the CITY within two (2) week after the Schematic Design Briefing. Comments will be compiled by the CITY Project Manager.
- No topographic survey or geotechnical investigation will be conducted for this project.

Meetings for Subtask 1.2:

- Schematic Design Briefing which will include a review of the preliminary layouts, preliminary schematics, preliminary P&IDs and control descriptions.

Deliverables for Subtask 1.2:

The list below provides the level of completeness for the submitted Schematic Design documents. Items to be provided at this level should include:

- A Drawing Index that reflects the total number of drawings anticipated for the completed project.
- Design Data and Criteria (Process Schematic).
- Preliminary Site Plan to depict new structure footprints, locations, and orientation.
- Preliminary Process and Instrumentation Diagrams (P&IDs) that depict the mechanical equipment, piping, instrumentation, and control equipment.
- Table of Contents for the technical specifications.
- Preliminary drafts of key technical specifications.
- Control logic and operating strategies.
- Schematic design briefing agenda, meeting minutes, and updated decision log.

CITY Responsibilities for Subtask 1.2:

- Provide review comments on the Schematic Design documents.

Subtask 1.3 – Schematic Design (30 Percent) Cost Estimate

Develop a construction cost estimate for the project in accordance with Carollo cost estimating guidelines. Unit quantities will be identified for all major structural components, major equipment, piping, electrical and instrumentation. Allowances will be used for mobilization, demobilization and bond and escalated to time of construction.

Meeting for Subtask 1.3:

- None.

Deliverables for Subtask 1.3:

- Schematic Design Cost Estimate.

CITY Responsibilities for Subtask 1.3:

- Review of the Schematic Design cost estimates.

Task 2 – Design Development Phase

Subtask 2.1 – Design Development (60 Percent) Submittal

The Design Development documents will be developed in standard CITY title block drawing sheet format to 60 percent and include general, structural, civil, mechanical, electrical, and instrumentation drawings. In addition, a site walkthrough will be conducted to assure all assumptions from the Schematic Design Submittal are correct prior to completing the Design Development package. All CITY review comments from the Schematic Design Submittal Review will be incorporated into the project documents and a comment review log provided to the CITY with appropriate responses. Two (2) half size plan set, one (1) full size plan set and two (2) copies of the specifications will be provided to the CITY.

Subtask 2.2 – Design Development (60 Percent) Cost Estimate

Develop an updated construction cost estimate for the project in accordance with Carollo cost estimating guidelines. Unit quantities will be identified for all major structural components, major equipment, piping, electrical and instrumentation. Allowances will be used for mobilization, demobilization and bond and escalated to time of construction.

Deliverables for Subtask 2:

- Schematic Design Submittal Package.
- Schematic Design Cost Estimate.

CITY Responsibilities for Subtask 2:

- Provide review comments on the Design Development documents.

Task 3 – Contract Document Phase

Subtask 3.1. - Contract Document (90 Percent) Submittal.

The Contract Document plans and specifications will be developed to the 90 percent level for CITY review and will include general, structural, civil, mechanical, electrical, and instrumentation drawings. All CITY review comments from the Design Development Submittal Review will be incorporated into the project documents and a comment review log provided to the CITY with appropriate responses. Two (2) half size plan sets, one (1) full size plan set and two (2) copies of the specifications will be provided to the CITY.

Subtask 3.2 – Contract Document (90 Percent) Cost Estimate

Develop an updated construction cost estimate for the project in accordance with Carollo cost estimating guidelines. Unit quantities will be identified for all major structural components, major equipment, piping, electrical and instrumentation. Allowances will be used for mobilization, demobilization and bond and escalated to time of construction.

Subtask 3.3 – Development Department Review

Submit Contract Document Plans and Specifications to the CITY's Development Department for code review and plan checking.

Subtask 3.4- Final Bid Ready Submittal Package

Develop the FINAL plans and specifications for bidding purposes. All CITY review comments from the Contract Document Submittal Review and the Development Department and will be incorporated into the project documents and a comment review log provided to the CITY with appropriate responses. Two (2) half size plan sets, one (1) full size plan set and Two (2) copies of the specifications will be provided to the CITY. All digital files associated with the FINAL Plans and Specifications Submittal will be provided in Autocad and pdf format.

Meeting for Subtask 3:

- Meeting with Development Department to review plan check comment.

Deliverables for Subtask 3:

- 90 percent submittal package.
- 90 percent cost estimate.
- 100 percent submittal package.
- Final cost estimate.

CITY Responsibilities for Subtask 3:

- Review of Contract Document submittal packages.
- Review of Contract Document cost estimates.
- Provide review comments on Contract Documents.

Task 4 – Bid Phase Services

This task includes attending pre-bid meeting with the CITY and answering questions from the meeting and provide answers with an addendum. Addenda format will be provided by the CITY.

Subtask 4.1 – Answer Bid Questions/ Provide Addenda for NFWRF.

The project team will provide assistance, as required, to the CITY during the bidding of the NFWRF project including answering questions, preparing addenda during the advertisement period, and providing ongoing consultation and interpretation of the construction documents.

Meeting for Subtask 4:

- Attend Pre-Bid Conference

Deliverables for Subtask 4:

- Answer bid questions

CITY Responsibilities for Subtask 4:

- Schedule Pre-Bid Conference.
- Provide Consultant with questions from contractors
- Review and Issue Addenda

Task 5 - Construction Support Services

Engineering services during construction will be provided under this task. These services are limited to the typical office services such as attending pre-construction conference, submittal review, commissioning of disinfection system, updating engineering report, answering contractor questions, and preparation of record drawings. The tasks associated with this section are described below.

Subtask 5.1 – Construction Support Services

This task includes the necessary support services by the project team during the construction phase of the project. This includes attending the pre-construction conference and if called upon by CITY, acting on CITY's behalf in discussing the various aspects of the construction phase. This includes review and comment on acceptability of contractor's submittals. The review and comment will be coordinated with CITY staff as appropriate for the submittal being reviewed. All comments will be logged and returned to the submitter while maintaining continuity and open lines of communication. The project team will respond to Contractor generated requests for clarifications and/or information. The project team will also review any proposed change order requests and make recommendations.

Subtask 5.2 – Commissioning of Disinfection System

Classically the commissioning of the disinfection system is performed by Carollo, however, for this project the commissioning of the disinfection system, including a check-point bioassay (if UV disinfection system is selected during schematic design phase) will be performed by equipment manufacturer as administered by Carollo Engineers following completion of the bioassay testing. Carollo will prepare the commissioning report and an addendum to the existing Recycled Water Engineer's Report for submittal to the California Department of Public Health.

Subtask 5.3 – Preparation of Record Drawings

Prepare Record Drawings at the end of construction to reflect all changes or deviations that occurred during construction. Construction mark-up drawings shall be provided by the CITY to Carollo.

Meeting for Subtask 5:

- Attend pre-construction conference.
- Independent 3rd party on-site inspection (3 days)

Deliverables for Task 5:

- NFWRF Submittal Reviews, RFI Responses, CO Reviews. (as required)
- Updated Engineering Report (2 sets)
- Disinfection Commissioning Report
- Record Drawings (1 set)

CITY Responsibilities for Subtask 5:

- Schedule Pre-Construction Conferences.
- Pre-Construction Conference agenda and meeting minutes.

Exhibit B

INSURANCE REQUIREMENTS
Consultant Service Agreement between City of Fresno ("CITY")
and CAROLLO ENGINEERS, Inc, **("CONSULTANT")**
Replacement Disinfection System at the NFWRF
PROJECT TITLE

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, which shall include insurance for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations, products and completed operations, and contractual liability.

2. The most current version of Insurance Service Office (ISO) Business Auto Coverage Form CA 00 01, which shall include 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 California Labor Code and Employer's Liability Insurance.

4. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT'S profession. Architect's and engineer's coverage is to be endorsed to include contractual liability.

Minimum Limits of Insurance

CONSULTANT shall maintain limits of liability of not less than:

1. General Liability:

   $1,000,000 per occurrence for bodily injury and property damage
   $1,000,000 per occurrence for personal and advertising injury
   $2,000,000 aggregate for products and completed operations
   $2,000,000 general aggregate applying separately to the work performed under the Agreement

2. Automobile Liability:

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

3. Employer's Liability:

   $1,000,000 each accident for bodily injury
   $1,000,000 disease each employee
   $1,000,000 disease policy limit

4. Professional Liability (Errors and Omissions)

   $1,000,000 per claim/occurrence
   $2,000,000 policy aggregate

Umbrella or Excess Insurance

In the event 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).

Deductibles and Self-Insured Retentions

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required hereunder and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to, and approved by, the CITY'S Risk Manager or his/her designee. At the option of the CITY'S Risk Manager or his/her designee, either (i) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents and volunteers; or (ii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY'S Risk Manager or his/her designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

Other Insurance Provisions

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

1. CITY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds.

2. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents and volunteers.

3. CONSULTANT'S insurance coverage shall be primary and no contribution shall be required of CITY.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against 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 "Retro Date" must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.

2. Insurance must be maintained and evidence of insurance must be provided for at least 5 years after any expiration or termination of the Agreement or, in the alternative, the policy shall be endorsed to provide not less than a 5-year

discovery period. This requirement shall survive expiration or termination of the Agreement.

3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a "Retro Date" prior to the effective date of the Agreement, CONSULTANT must purchase "extended reporting" coverage for a minimum of 5 years following the expiration or termination of the Agreement.

4. A copy of the claims reporting requirements must be submitted to CITY for review.

5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required hereunder shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after 30 calendar day written notice by certified mail, return receipt requested, has been given to CITY. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish 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 CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than 15 calendar days prior to the expiration date of the expiring policy.

Acceptability of Insurers

All policies of insurance required hereunder shall be placed with an insurance company(ies) admitted by the California Insurance Commissioner to do business in the State of California and rated not less than "A-VII" in Best's Insurance Rating Guide, or authorized by CITY'S Risk Manager.

Verification of Coverage

CONSULTANT shall furnish 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 his/her designee prior to CITY'S execution of the Agreement and before work commences.

Exhibit C

DISCLOSURE OF CONFLICT OF INTEREST

Replacement Disinfection System at the NFWRF
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	☐	☒
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?	☐	☒
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	☐	☒
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?	☐	☒
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?	☐	☒
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?	☐	☒
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

Additional page(s) attached.

Signature

11/11/11
Date

Steve Swanback
(name)

Carollo Engineers, Inc
(company)

2700 Ygnacio Valley Rd #300
(address)

Walnut Creek CA 94598
(city state zip)

FISCAL IMPACT STATEMENT

DESIGN OF NFWRF NEW DISINFECTION SYSTEM DESIGN CONTRACT

RECOMMENDATION	TOTAL OR CURRENT	ANNUALIZED COST
Direct Cost	$183,133.00	_____
Indirect Cost	$4,000.00	_____
TOTAL COST	$187,133.00	_____
Additional Revenue or Savings Generated	$0.00	_____
Net City Cost	$187,133.00	_____
Amount Budgeted (If none budgeted, Identify source)*	$500,000.00	_____

*The funds for this contract exist in the current Sewer Enterprise Fund budget.