

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

THIS AGREEMENT is made and entered into effective the 2nd day of July ~~June~~, 2013, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and Blair, Church and Flynn Consulting Engineers, A California 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 multiple projects for the Recycled Water Distribution System Design, hereinafter referred to individually and collectively 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, Completion Schedule and Liquidated Damages. 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, for each individual Project identified by "Project ID" in Table 1 of **Exhibit A**. A separate Notice to Proceed will be issued for each of the aforementioned Parts and for each of the listed Projects under such "Project ID." CITY may elect to contract for one or more of such listed Projects at any time and in any order. By entry into this Agreement and upon CITY'S issuance of a written "Notice to Proceed," CITY contracts for the services in Part One for Project ID "SW 1A" as identified in Table 1 of **Exhibit A**. CONSULTANT shall not perform any other Part or Project of the Agreement, and this Agreement shall not be a contract for any other Part or listed Project, 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 and Projects as 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, after a written Notice to Proceed for the respective Project, review the description of the Project set forth in **Exhibit A** and consult with designated representatives of CITY to ascertain the requirements for 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:
PDF Format.

(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") for the respective Project ID as set forth in Table 3 of **Exhibit A**, 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 for the Project 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 the number of calendar days, as listed under "Submit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 the number of calendar days, as listed under "Resubmit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 for the respective Project:

(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 for the respective Project 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 the number of calendar days, as listed under "Submit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, from the issuance of a Notice to Proceed for this Part unless an extension of time is approved in writing by the Director. For each projects' re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within the number of calendar days, as listed under "Resubmit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 for the respective Project:

(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 the 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 the 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 all Project information available to CITY.

(4) CONSULTANT shall provide CITY with 5 sets of completed plans and 5 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: dwg. and PDF.

(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 for the respective Project. 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 for the respective Project 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 the number of calendar days, as listed under "Submit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 the number of calendar days, as listed under "Resubmit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 for the respective Project:

(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 for the respective Project, 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 for the respective Project. 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 than 10%.

(e) Part Five. Construction Phase and General Construction Contract Administration. The construction phase will begin with the award of the general construction contract for the respective Project, which shall constitute a written Notice to Proceed with this Part Five for the respective Project, and will terminate when a Notice of Completion is filed for the respective Project. Upon award of a general construction contract for the respective 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 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 in 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 the number of calendar days, as listed under "Submit" in Table 2 of **Exhibit A** for this Part and the respective Project ID, 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 the number of calendar days, as listed under 'Resubmit' in Table 2 of **Exhibit A** for this Part and the respective Project ID, from the 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 PDF format.

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 \$3,324,000 and a contingency amount not to exceed \$100,000 for any additional work rendered pursuant to Subsection (d) below and authorized in writing by the Director. 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 and respective Project 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 or any Project 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 for each respective Project of CONSULTANT'S performance as shown in Table 1 of **Exhibit A**. Prior to the award of a general construction contract for the respective 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 for the respective Project, changes due to Code revisions or enactments adopted after such date shall constitute additional work for such Project 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 the 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 standards of said profession.

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 each of the respective Projects 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 an 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 Karl Kienow, 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.

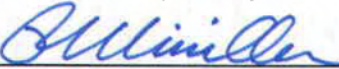
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IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

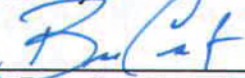
CITY OF FRESNO,
a California municipal corporation

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

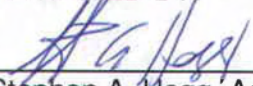
ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: 
Deputy 7/2/13

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By:  6/12/13
Brandon M. Collet Date
Deputy City Attorney

REVIEWED BY:


Stephen A. Hogg, Assistant Director
Department of Public Utilities


Addresses:

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

Attachments:

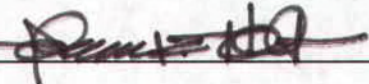
1. Exhibit A - Scope of Services
2. Exhibit B - Insurance Requirements
3. Exhibit C - Conflict of Interest Disclosure Form

Blair, Church and Flynn Consulting
Engineers,
a California corporation

By: 

Name: Karl E. Kienow

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

By: 

Name: Adam K. Holt

Title: CFO / Secretary
[if corporation or LLC, CFO,
Treasurer, Secretary or
Assistant Secretary.]

Any Applicable Professional

License:

Number: C51,615

Name: Karl E. Kienow

Date of Issuance: 4 Feb 1994

CONSULTANT:

Blair, Church and Flynn Consulting
Engineers
Attention: Karl Kienow, Vice
President
451 Clovis Ave. Suite 200
Clovis, CA 93612
Phone: (559) 326-1400
FAX: (559) 326-1500

EXHIBIT A

RECYCLED WATER DISTRIBUTION SYSTEM, SOUTHWEST QUADRANT SCOPE OF ENGINEERING SERVICES

3 June 2013

Project Background

This Scope of Engineering Services (Scope) provides for the design of certain recycled water distribution system pipelines identified in the City of Fresno's Recycled Water Master Plan (Master Plan), together with related pumping facilities. The following paragraphs provide a description of key elements of the proposed improvements.

Recycled Water Distribution Pipelines

The Master Plan pipe segments covered by this Scope are Southwest Quadrant Pipe Segments No. 1 and No. 4. Together, the identified pipe segments include approximately 21.3 miles of recycled water distribution pipelines, generally ranging in size from 8 to 60 inches in diameter. For the purposes of this Scope, they are collectively referred to as the Project Pipelines. The Project Pipelines extend from the proposed Recycled Water Treatment Facility (RWTF) to be sited at the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) to locations throughout the southwest area of the City, including the downtown area, as described in the Master Plan.

Recycled Water Pumping Facilities

One recycled water pump station associated with the Project Pipelines, as identified in the Master Plan, is included under this Scope. For the purposes of this Scope, it is referred to as the Project Pump Station. Pump station design shall include landscape and irrigation design for proposed landscaping and screening.

The proposed RWTF will also include a pump station, which will be designed separately as part of the RWTF. The RWTF pump station is therefore not included under this Scope.

Recycled Water Storage Facilities

No recycled water storage facilities are included under this Scope. The proposed RWTF will include a storage facility, which will be designed separately as part of the RWTF. Other recycled water storage facilities are planned to be constructed for future phases of the recycled water distribution system.

Environmental Services

For the City of Fresno, Environmental Science Associates (ESA) prepared a draft program environmental impact report dated March 2011, and a final program environmental impact report dated June 2011, for the Master Plan. Together, the draft and final environmental impact reports are referred to as the "City of Fresno Recycled Water Master Plan Program Environmental Impact Report" (Program EIR). A Program EIR may be used as California Environmental Quality Act (CEQA) compliance for subsequent related activities such as this project. However, subsequent activities must be examined in light of the Program EIR to determine whether additional subsequent environmental review is required. Subsequent environmental review documents may be "tiered" from the Program EIR, to focus on environmental issues specific to the subsequent activity that were not fully evaluated in the Program EIR.

It is considered likely that this project will require additional environmental review to the extent of an Initial Study and Mitigated Negative Declaration (IS/MND) tiered from the Program EIR. This Scope includes the necessary additional environmental review and the preparation and processing of a tiered IS/MND for the project. This Scope does not include preparation and processing of a tiered Project EIR. Should additional environmental evaluation reveal environmental impacts that would require the preparation of a tiered EIR, such work would be done outside the framework of the Agreement for this Scope, or under an amendment to the Agreement.

The City of Fresno plans to apply for State Revolving Fund (SRF) loan funding for some or all of the proposed recycled water facilities. This Scope includes additional environmental analysis and documentation to meet the "CEQA Plus" requirements for the SRF loan application process.

This Scope also includes the following environmental work associated with the Mitigation Monitoring and Reporting Program (MMRP) of the Program EIR, provided to the extent necessary for compliance with the MMRP.

- antidegradation analysis
- preconstruction surveys for:
 - burrowing owls
 - horned lark, tri-colored blackbird, raptors, and other protected migratory bird species
 - elderberry shrubs
 - San Joaquin kit fox
 - habitat suitable for the California Tiger Salamander
 - western pond turtle
 - San Joaquin pocket mouse and American badger
 - special status bats
 - special status plant species
- jurisdictional wetland delineation
- riparian habitat assessment
- Phase 1 Environmental Site Assessment
- surveys for resources of potential historic significance, conducted prior to approval of plans
- Phase 1 surveys for archaeological resources, conducted prior to approval of plans

In general, all MMRP-related work that must be done prior to construction or prior to approval of project plans is included under this Scope. Other MMRP provisions that can reasonably be incorporated in construction contract documents will be required to be implemented by the construction contractor.

Project Work Plan

Project design shall be accomplished through a five-part work plan including the following phases:

- Schematic Design Phase
- Design Development Phase
- Construction Document Phase
- Bidding Phase
- Construction Phase and General Construction Contract Administration

Schematic Design Phase

Topographic surveys shall be accomplished using a combination of conventional ground surveys and aerial photogrammetric methods. The use of aerial photogrammetric methods will generally be limited to those areas where conventional ground survey methods would be unsafe or not cost effective. Where necessary to provide adequate topographic survey detail and measure flowline elevations in manholes, ground survey methods shall be used as necessary to supplement photogrammetric surveys.

A geotechnical investigation shall be conducted. Borings for pipeline alignments shall be done at intervals of 1/8 mile or less, and at each bore-and-jack location, and shall extend to a depth of five feet below the proposed bottom of pipe. One boring shall be done at the pump station site. Laboratory testing shall include gradation, moisture-density, shear, corrosivity, and resistivity analyses. A geotechnical report shall be prepared to document the investigation, and shall include pipe bedding and foundation recommendations.

During the Schematic Design Phase, a series of workshop-format meetings shall be held with City personnel to present in-progress efforts and solicit input as to City preferences for the various elements of the project. Consultant shall prepare and distribute meeting agendas and minutes, and shall conduct meetings so as to accomplish meeting objectives efficiently and completely.

Additional project environmental review shall be done as part of the Schematic Design Phase, along with preparation of a Project Description, Initial Study, Environmental Checklist, and Mitigated Negative Declaration, which will together make up the IS/MND documents. The IS/MND documents shall be

submitted to the City for review and approval prior to circulation for review by other agencies and interested parties.

The Schematic Design Phase shall culminate in the submittal of a Schematic Design Report addressing the various issues expected to influence project design, including utility research findings, pipeline alignments, pump station siting, results of geotechnical investigations, potential conflicts with existing facilities, and additional environmental review. The report shall include recommendations for the design criteria to be employed for the subsequent design of the pump station. The report shall also include recommendations for features to be implemented in subsequent design development and construction document phases, including pipeline alignment, pipe material, pumping and control equipment, and construction method recommendations. The geotechnical investigation report and preliminary IS/MND documents shall be appended to the Schematic Design Report.

The Schematic Design Report shall also address overall construction phasing and sequencing, and shall include recommendations for the number, limits and structure of the construction contracts under which the proposed improvements will be constructed. A master project schedule for the design and construction of the proposed improvements shall be developed and included.

The Schematic Design Report shall include schematic plans (approximately 30% design completion) at reduced scale, together with construction cost estimates. Schematic plans shall include topographic survey results, aerial photography, utility research results, and existing rights-of-way and easements. For all of the proposed Project Pipelines, schematic plans shall also include sufficient design information to clearly establish proposed pipeline sizes and alignments. For the Project Pump Station, schematic plans shall also include sufficient design information to clearly establish site location and size, together with the general arrangement of proposed facilities on the site.

The Schematic Design Phase shall extend to include the submittal and processing of the IS/MND documents, after the City has reviewed and approved the preliminary IS/MND documents submitted with the Schematic Design Report. Consultant shall prepare and file an Administrative Draft Initial Study, a Draft Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration, a Notice of Completion, and the final Mitigated Negative Declaration. Consultant shall submit the IS/MND documents to the State Clearinghouse as necessary for circulation and review by agencies and interested parties. Consultant shall revise IS/MND documents to incorporate and address comments received, and shall attend related public hearings and provide such other services as may be necessary to support IS/MND processing.

Design Development Phase

The Design Development Phase shall include the preparation and submittal of preliminary plans, specifications and estimates (approximately 60% design completion), incorporating the recommendations of the Schematic Design Phase as approved by the City. The Design Development Phase shall also include the preparation of legal descriptions and acquisition diagrams in support of the City's efforts for the acquisition of necessary easements and rights-of-way. This Scope includes an allowance for legal descriptions and acquisition diagrams for 40 acquisitions. If fewer are required, the actual cost shall be reduced proportionately; if more are required, as approved by the City, a corresponding amendment to the Agreement may be necessary.

Utility coordination efforts conducted during the Design Development Phase shall include the location of critical underground utility facilities by pothole excavation methods. This Scope includes an allowance for utility pothole excavations at 80 locations. If fewer are required, the actual cost shall be reduced proportionately; if more are required, as approved by the City, a corresponding amendment may be necessary.

Construction Document Phase

The Construction Document Phase shall include the preparation and submittal of plans, specifications and estimates at the draft final (approximately 90% design completion) and final (100% complete) stages of completion, and a Stormwater Pollution Prevention Plan (SWPPP), for each construction contract. At each submittal stage, review comments resulting from the prior submittal shall be thoroughly addressed.

The preparation of plans, specifications, and estimates for the construction contracts are expected to result in multiple sets of bid and construction documents, intended to be bid and constructed under as

many as five separate construction contracts. The actual number of separate construction contracts shall be determined during the Schematic Design Phase, as described above.

Consultant shall provide the engineering services enumerated in the following task outline.

PART 1 SCHEMATIC DESIGN PHASE

A. PROGRAMMING AND PROJECT MANAGEMENT

1. Prepare and Maintain Design and Construction Schedule
2. Schedule and Conduct Project Kick-off Meeting
3. Prepare and Submit Monthly Progress and Budget Reports
4. Provide Support for SRF Loan Applications
 - a. Optional task, at City discretion

B. SURVEYING, PHOTOGRAPHY AND MAPPING

1. Obtain and Incorporate Aerial Photography
 - a. Fresno Stock Coverage
2. Provide Traffic Control for Surveys
3. Conduct Topographic Surveys
 - a. Conventional Ground Survey and Photogrammetric Methods

C. ENVIRONMENTAL SERVICES

1. Conduct Project Environmental Review in Context of Program EIR
2. Prepare IS/MND Documents
 - a. Environmental Checklist
 - b. Administrative Draft Initial Study
 - c. Draft Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration
 - d. Notice of Completion
 - e. Final Mitigated Negative Declaration
3. IS/MND Processing
 - a. File IS/MND documents with State Clearinghouse for circulation and review
 - b. Revise IS/MND documents to incorporate and address comments
 - c. Prepare and file Notice of Determination
 - d. Attend related public hearings
4. Preconstruction Surveys for Plants, Animals and Habitats Identified in the MMRP
5. Jurisdictional Wetland Delineation
6. Riparian Habitat Assessment
7. Phase 1 Environmental Site Assessment
 - a. As necessary to meet requirements of MMRP
 - b. Review locations within 1/4 mile of project facilities
 - c. Contact regulatory agencies to obtain detailed additional information for identified locations on or adjacent to project pipeline alignments and pump station site
8. Surveys for Resources of Potential Historic Significance
 - a. Conducted prior to approval of plans
9. Phase 1 Surveys for Archaeological Resources
 - a. Conducted prior to approval of plans
10. Environmental Services Shall Meet CEQA Plus Requirements for SRF Loan Applications

D. ANTIDEGRADATION ANALYSIS

1. Project Description, Purpose of Report, and Approach to Analysis
2. Summary of Antidegradation Policy and Regulations
3. Environmental Setting
4. Current and Potential Future Beneficial Uses of Groundwater
5. Water Quality Criteria and Objectives
6. Description of the Tertiary Treatment Facilities and Expected Quality of Recycled Water.
7. Description of Recycled Water Project
8. Determination of Constituents of Concern (COC) in Recycled Water
 - a. COCs are expected to be limited to salinity, total dissolved solids (TDS) and nitrate
9. Incorporate Assessment of Water Quality Impacts
 - a. Assessment of water quality impacts will be provided by the City's groundwater consultant

10. Development of Alternative Treatment or Control Measures
11. Socioeconomic Analysis (SEA)
 - a. Update Master Plan cost/benefit analysis to reflect findings of the water quality assessment
- E. GEOTECHNICAL SERVICES
 1. Conduct Geotechnical Investigation
 - a. Borings at intervals of 1/8 mile or less for pipeline alignments
 - b. One boring at each bore-and-jack location
 - c. One boring at pump station site
 2. Prepare geotechnical report
 - a. Include pipe bedding and foundation recommendations
 - b. Include trench configuration and trench safety recommendations
- F. SCHEMATIC DESIGN REPORT
 1. Conduct Site Investigations
 2. Conduct Public Street, Property Line & OPL Research
 3. Meet With Caltrans Staff for Crossings of State Right-of-Way
 4. Meet With Railroad Companies for Rail Crossings
 5. Prepare and Submit Underground Classification Applications
 6. Conduct Office and Field Utility Investigations
 7. Conduct Workshop-Format Meetings
 8. Prepare Schematic (30%) Plans
 9. Prepare Itemized Estimates of Quantities and Cost
 10. Prepare Outline Technical Specifications
 11. Prepare Schematic Design Report, Incorporating:
 - a. Topographic Surveys
 - b. Geotechnical Investigation
 - c. Preliminary IS/MND Documents
 - d. Reports, Surveys and Assessments for MMRP Compliance
 - e. Antidegradation Analysis
 - f. Phase 1 Environmental Site Assessment
 - g. Utility Investigation Findings
 - h. Pump Station and Storage Facility Design Criteria
 - i. Material and Equipment Recommendations
 - j. Construction Method Recommendations
 - k. Schematic Plans
 12. Submit Schematic Design Report

PART 2 DESIGN DEVELOPMENT PHASE

- A. PRELIMINARY PLANS, SPECIFICATIONS AND ESTIMATES
 1. Prepare Preliminary Cover and Index Sheets
 2. Prepare Preliminary Plan and Profile Drawings
 3. Prepare Preliminary Pump Station Drawings
 4. Prepare Preliminary Landscape and Irrigation Drawings
 5. Prepare Preliminary Structural Detail Drawings
 6. Prepare Preliminary Construction Detail Drawings
 7. Conduct Hydraulic Surge Analysis
 8. Prepare Caltrans Permit Application Plans
 9. Submit Caltrans Permit Applications
 10. Prepare Legal Descriptions and Diagrams for Acquisition of Easements and Rights-of-Way (40 Acquisitions)
 11. Prepare Preliminary Technical Specifications
 12. Prepare Itemized Estimate of Quantities and Cost
 13. Address Schematic Design Review Comments
 14. Submit Preliminary (60%) Plans, Specifications and Estimate
- B. UTILITY AND RAILROAD COORDINATION
 1. Prepare and Submit Railroad Permit Applications
 2. Submit Preliminary Plans to Affected Companies, Agencies & Districts

3. Locate Critical Utility Facilities by Pothole Excavation Methods (80 Locations)
4. Prepare Utility Avoidance Plan
5. Coordinate Relocation Efforts with Project Design

PART 3 CONSTRUCTION DOCUMENT PHASE

A. DRAFT FINAL DESIGN

1. Prepare Draft Final Cover and Index Sheets
2. Prepare Draft Final Plan and Profile Drawings
3. Prepare Draft Final Pump Station Drawings
4. Prepare Draft Final Landscape and Irrigation Drawings
5. Prepare Draft Final Structural Detail Drawings
6. Prepare Draft Final Construction Detail Drawings
7. Prepare Final Caltrans Permit Application Plans
8. Prepare Stormwater Pollution Prevention Plans
9. Prepare Draft Final Technical Specifications
10. Incorporate City "Boilerplate" Documents
11. Prepare Itemized Estimates of Quantities and Cost
12. Address Preliminary Review Comments
13. Submit Draft Final (90%) Plans, Specifications and Estimates

B. FINAL PLANS, SPECIFICATIONS AND ESTIMATES

1. Prepare Final Plans
2. Prepare Final Specifications
3. Prepare Final Itemized Estimates of Quantities and Cost
4. Address Draft Final Review Comments
5. Submit Final (100%) Plans, Specifications and Estimates

PART 4 BIDDING PHASE

A. BID SERVICES

1. Attend Pre-Bid Conferences
2. Prepare Addenda and Clarifications
3. Attend Bid Openings and Evaluate Bid Proposals

PART 5 CONSTRUCTION PHASE AND GENERAL CONSTRUCTION CONTRACT ADMINISTRATION

A. CONSTRUCTION SERVICES

1. Attend Pre-Construction Conferences
2. Review Shop Drawings and other Contractor Submittals
3. Provide General Consultation and Advice
4. Respond to Requests for Information (RFIs)
5. Provide Periodic Worksite Observation
6. Review Progress Payments as Requested
7. Prepare Record Drawings

ASSUMPTIONS

- A. Pump station design will not include a building to house pumping facilities or related controls.
- B. Preparation of construction documents will result in a maximum of five sets of construction contract documents.
- C. Antidegradation Analysis will provide general coverage for the entire Master Plan recycled water system, and specific coverage for the Southwest Quadrant facilities included under this Scope.
- D. No COCs other than salinity, total dissolved solids (TDS) and nitrate will be evaluated in the Antidegradation Analysis, and no additional effluent testing will be needed.
- E. The City's groundwater consultant will contract directly with the City for assessment of water quality impacts to be incorporated in the Antidegradation Analysis.
- F. For the Antidegradation Analysis, a limited Socioeconomic Analysis (SEA) based on planning level costs provided in the Master Plan will be sufficient, such that the SEA will not include the use of economic modeling tools to assess economic impacts.

- G. R-value testing of soils for pavement replacement design is not required, and so is not included as part of the Geotechnical Investigation.
- H. The City will obtain all preliminary title reports required in connection with the acquisition of easements and rights-of-way

January 1, 2013

GENERAL ENGINEERING FEE SCHEDULE
For Projects Subject to Prevailing Wage

<u>CLASSIFICATION</u>	<u>RATE</u>
Principal Engineer	\$160.00/Hour
Program Manager	155.00/Hour
Professional Civil Engineer 3	150.00/Hour
Professional Civil Engineer 2	140.00/Hour
Professional Civil Engineer 1	125.00/Hour
Assistant Engineer 3	110.00/Hour
Assistant Engineer 2	105.00/Hour
Assistant Engineer 1	95.00/Hour
Professional Land Surveyor 2	125.00/Hour
Professional Land Surveyor 1	120.00/Hour
Assistant Surveyor	90.00/Hour
Licensed Landscape Architect	105.00/Hour
Design Technician	100.00/Hour
CAD Technician 3	90.00/Hour
CAD Technician 2	80.00/Hour
CAD Technician 1	65.00/Hour
Staff Analyst	90.00/Hour
Clerical	60.00/Hour
Engineering Aide	55.00/Hour
Construction Inspector	100.00/Hour
Construction Administrator	85.00/Hour
1-Man Survey Party	150.00/Hour
2-Man Survey Party	250.00/Hour
3-Man Survey Party	350.00/Hour
Survey Party Travel	85.00/Hour
Computer Aided Design, Drafting & Surveying Systems Surcharge	10.00/Hour
Ground Penetrating Radar Surcharge	20.00/Hour
GPS Receivers Surcharge	25.00/Hour/Each
Robotic Total Station Surcharge	25.00/Hour/Each
HD Scan Station Surcharge	200.00/Hour
Materials, Printing, Equipment Rental and Associated Expense	Cost x 1.15
Subconsultant Procurement	Cost x 1.15
Mileage	0.70 per mile

TABLE 1
COMPENSATION DISTRIBUTION BY PROJECT AND PHASE

	Part 1	Part 2	Part 3	Part 4	Part 5	
	Schem	Design	Const	Bidding	Const	Project
	Design	Devel	Docs	Phase	Phase	Subtotals
Project ID	%	%	%	%	%	%
Project SW 1A	15.14%	2.74%	3.47%	0.28%	0.89%	22.52%
Project SW 1B	15.29%	2.77%	3.51%	0.28%	0.90%	22.75%
Project SW 1C	14.63%	2.65%	3.36%	0.27%	0.86%	21.76%
Project SW 1D & 4	16.65%	3.01%	3.82%	0.31%	0.98%	24.78%
Project SW PS1	2.61%	1.70%	1.90%	0.60%	1.37%	8.19%
Phase Subtotals:	64.32%	12.87%	16.06%	1.74%	5.00%	100.00%

TABLE 2
CALENDAR DAY DURATION BY PROJECT AND PHASE

	Part 1		Part 2		Part 3		Part 4	Part 5		
	Schematic		Design		Constr		Bidding	Constr		Project
	Design		Devel		Docs		Phase	Phase*		Subtotal
Project ID	Submit	Resub	Submit	Resub	Submit	Resub	Phase	Submit	Resub	
Project SW 1A	110	30	70	30	60	30	N/A	30	20	360
Project SW 1B	140	30	80	30	70	30	N/A	30	20	410
Project SW 1C	200	30	110	30	90	30	N/A	50	20	540
Project SW 1D & 4	220	30	130	30	110	30	N/A	50	20	600
Project SW PS1	60	20	120	20	60	20	N/A	30	20	330

* Construction Phase durations listed apply to record drawing preparation only.

TABLE 3
CONSTRUCTION BUDGET DISTRIBUTION
BY PROJECT FOR TOTAL CONSTRUCTION
COST OF \$43,900,000

Project ID	Construction Budget Distribution
Project SW 1A	23.23%
Project SW 1B	23.46%
Project SW 1C	22.55%
Project SW 1D & 4	25.74%
Project SW PS1	5.01%
Total:	100.00%

CITY OF FRESNO Recycled Water Distribution System Southwest Quadrant Proposed Breakdown of Construction Projects

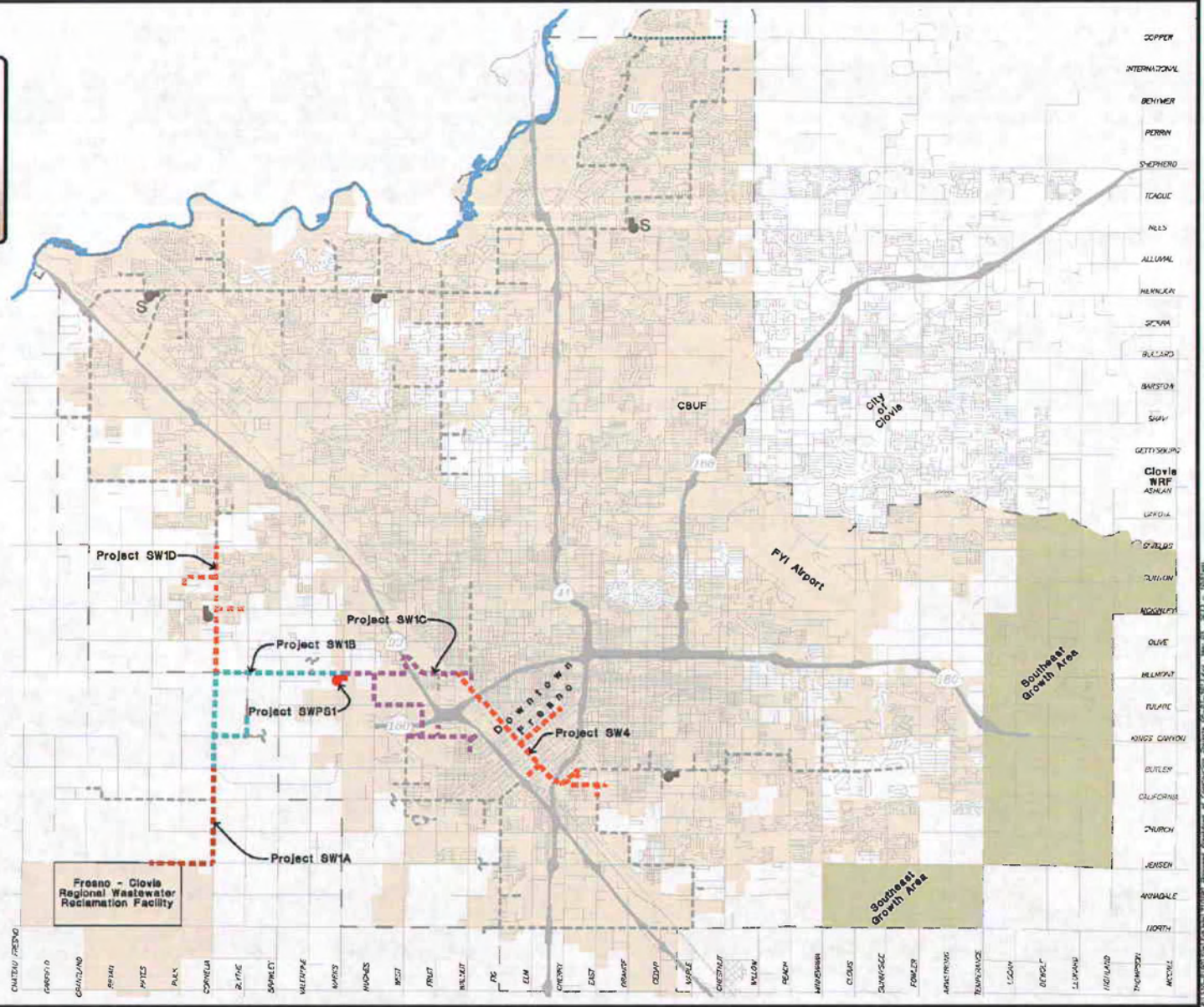


Map Legend:

- Fresno City Limits
- Southeast Growth Area
- Street Centerlines
- Fresno Sphere of Influence
- Future Recycled Water Pipelines
- Existing Recycled Water Pipeline
- Future Pump Station
- S Future Storage Facility

Proposed Construction Projects:

1. Project SW1A -----
2. Project SW1B -----
3. Project SW1C -----
4. Project SW1D & SW4 -----
5. Project SWPS1 ●



SCALE (MILES)
0 7.5 15 30

Exhibit B

INSURANCE REQUIREMENTS

**Consultant Service Agreement between City of Fresno ("CITY")
and Blair, Church and Flynn Consulting Engineers ("CONSULTANT")**
Recycled Water Distribution System Design
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 policies 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

Recycled Water Distribution System, Southwest Quadrant
PROJECT TITLE


		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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:

Item 3: Blair, Church & Flynn Consulting Engineers has a number of clients that could potentially do business with the City of Fresno including: the City of Clovis, the County of Fresno, Fresno Irrigation District, Fresno Metropolitan Flood Control District, Clovis USD, Fresno USD and Central USD.

Item 5: Efren Banuelos, Jr. is currently employed by Blair, Church & Flynn Consulting Engineers as a Project Engineer. His father, Efren Banuelos, Sr. is employed by the City of Fresno in a department that is not involved in the administration of the **Recycled Water Distribution System, Southwest Quadrant** project.

Efren Banuelos, Jr. is typically not assigned to City of Fresno projects. He will not have any significant role in the Recycled Water Distribution System, Southwest Quadrant project.


Signature

June 11, 2013

Date

Adam K. Holt
(name)

Blair, Church & Flynn
(company)

451 Clovis Ave, Suite 200
(address)

Clovis, CA 93612
(city state zip)

FIRST AMENDMENT TO AGREEMENT

THIS FIRST AMENDMENT TO AGREEMENT ("Amendment") made and entered into as of this 30th day of June, 2016, amends the Agreement entered into between the CITY OF FRESNO, a California municipal corporation ("CITY"), and Blair, Church and Flynn Consulting Engineers, a California Corporation ("CONSULTANT").

RECITALS

WHEREAS, CITY and CONSULTANT entered into an agreement, dated July 2, 2013, for professional engineering services for the design of the Recycled Water Distribution System Design, Southwest Quadrant ("Agreement"); and

WHEREAS, CITY desires to modify the Agreement to include a revised location for pump station No. 1; and

WHEREAS, CITY desires to modify the Agreement to include the preparation of the amended CEQA documentation for the pump station No.1 site; and

WHEREAS, CITY desires to modify the Agreement to provide Hughes Avenue topography, geotechnical investigation, and Phase 1 Environmental Site Assessment work due to alignment revision for SW1C Part 2; and

WHEREAS, the parties desire to modify the Agreement to provide temporary traffic control plans; and

WHEREAS, the parties desire to modify the Agreement to revise the pipeline route through Roeding Park to continue along Dennett Avenue and along Palm Avenue; and

WHEREAS, the parties desire to modify the Agreement to revise the pipeline route through Broadway Plaza to continue along Fresno/Merced Alley and Mariposa Street; and

WHEREAS, CITY desires to modify the Agreement to provide additional potholing to help minimize construction change order cost for unforeseen utilities; and

WHEREAS, CITY desires to add an additional 172 potholes to finish the project designs for SW1C (Parts 2 and 3), SW1D, and SW4; and

WHEREAS, due to the need for additional services, the parties desire to increase the total compensation by an additional \$674,240 to complete the expanded Scope of Work; and

WHEREAS, with entry into this Amendment, CONSULTANT agrees that CONSULTANT has no claim, demands, or disputes against CITY.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and premises hereinafter contained, to be kept and performed by the respective parties, the parties agree that the aforesaid Agreement be amended as follows:

1. CONSULTANT shall provide additional services as described in **Exhibit 1**, attached hereto and incorporated herein by reference.

2. Exhibit A of the Agreement is amended to add the additional professional scope of services in **Exhibit 1**, attached hereto and incorporated herein by reference.

3. Section 3(a) of the Agreement is amended in its entirety to read as follows:


"(a) 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 \$3,952,210 and a contingency amount not to exceed \$100,000 for any additional work rendered pursuant to Subsection (d) below and authorized in writing by the Director."

4. In the event of any conflict between the body of this Amendment and any Exhibit or Attachment hereto, the terms and conditions of the body of this Amendment 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 or restate any terms or conditions, or modify the allocation of risk between the parties, provided for within the body of this Amendment or the body of the Agreement, shall be null and void.

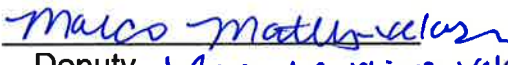

5. Except as otherwise provided herein, the Agreement entered into by CITY and CONSULTANT, dated July 2, 2013, remains in full force and effect.

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

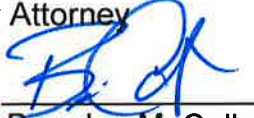
CITY OF FRESNO,
a California municipal corporation

By: 
Thomas C. Esqueda, Director
Department of Public Utilities


ATTEST.
YVONNE SPENCE, CMC
City Clerk

By: 
Deputy 
6/30/16


APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By:  5/31/16
Brandon M. Collet Date
Deputy City Attorney

Blair, Church & Flynn Consulting Engineers,
a California corporation

By: 
Name: KARL E KIENDOW

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

By: 
Name: ADAM K. HOLT

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

Attachment: Exhibit 1

EXHIBIT 1

ADDITIONAL PROFESSIONAL SERVICES

Blair, Church & Flynn Consulting Engineers prepared and submitted a proposal for additional professional services for Projects SW1A, 1B, 1C, 1D, & 4, and PS1 to the City of Fresno on September 18, 2014. Among other items, the proposal included extra costs for rerouting the Project SW1C pipeline down Hughes Avenue instead of Nielsen Avenue, and rerouting the Project SW1B pipeline down Blythe Avenue instead of Whitesbridge Avenue.

Additional work beyond that discussed above and that is not included in our scope is now required for the project, and this letter presents our proposal for those additional professional services for various parts of the Southwest Quadrant of the recycled water.

The City directed that Project SW1C be shortened to only include the pipeline from Belmont Avenue at Marks Avenue into Roeding Park due to the timing of delivering recycled water to Roeding Park by October 2016. The remaining portions of SW1C will be included with SW1D & SW4. They have been arbitrarily assigned the following names that are used in this proposal and on the plans being prepared:

SW1C Part 2: The portion of the original SW1C south of Belmont on Hughes Avenue, and eastward towards Trinity Street.

SW1C Part 3: The pipeline from the end of the shortened SW1C in Roeding Park over to the intersection of Palm and H Streets (see Item D of this proposal).

Scope of Services

A. Work Related to New Pump Station No. 1 Site (SWPS1 and SW1D & SW4)

When work on the project began, Pump Station No. 1 was programmed to be constructed on the City-owned property just east of Fire Station No. 19 on Belmont Avenue between Valentine and Marks Avenues. As part of the project, a topographic survey and aerial photography were obtained for the site, and a geotechnical boring was collected and laboratory analyses performed. The City subsequently determined that the initial site was not available, and after performing a site selection study, selected a new site just southwest of the initial site. They also determined that the pump station should contain a building to house the electrical equipment and provide theft protection.

The selection of a new site requires that the project CEQA documents be updated, the Phase 1 Environmental Site Assessment (ESA) be updated, new geotechnical information be obtained, and topographic surveys be performed. Since the new site is not adjacent to Belmont Avenue where the recycled water main will be, topographic surveys and pipeline design will be required in Valentine and Franklin Avenues. Also, the City's desire to have a building to house the electrical equipment necessitates the design of the building. Each of these items is discussed in the following paragraphs:

1. For the CEQA documents update, we will perform biological and cultural surveys for the new site, and prepare an addendum to the adopted

Mitigated Negative Declaration (MND) and circulate it as required. Additionally, biological and cultural resource documents for submittal with the Financial Assistance Program application will be updated. This includes submitting the updated Cultural Resources Technical Report, preparation of request for concurrence on Section 106 compliance to the State Historic Preservation Office, and an updated application.

2. For the Phase 1 ESA work, we will prepare a Phase 1 ESA report for Valentine and Franklin Avenues leading to the pump station site, and the pump station site, to identify recognized environmental conditions.
3. For the required geotechnical information, we will perform a geotechnical boring within the boundaries of the new site, as well as one boring at the intersection of Valentine and Franklin Avenues, perform the necessary lab analyses, and prepare an addendum to the project geotechnical engineering report. The addendum will include recommendations relative to developing the site.
4. For the topographic surveying, we will perform a site survey that includes a survey of the canals around the site to help determine the limits of the proposed property lines for the new site. In addition, Valentine and Franklin Avenues between the site and Belmont Avenue will be surveyed from right-of-way to right-of-way.
5. For the pipeline design in Valentine and Franklin Avenues, we will prepare plan and profile drawings and detail sheets to be included in the RWTM SW1D & SW4 bid package. A utility search will also be performed. Since the extent of the existing utilities is unknown at this time, an allowance of seven potholes is included. If fewer potholes are required, the fees will be reduced accordingly. Additionally, a cost estimate will be provided, technical specifications will be prepared, and the bidding and construction support services included in the original scope are included. The pipeline is expected to be steel pipe, so related steel pipe calculations will also be provided.
6. A building will be designed and included in the pump station plans. The building design will include all relevant details, specifications, and a cost estimate.

B. Hughes Avenue Topography, Geotechnical Investigation, and Phase 1 Environmental Site Assessment (ESA) Work Due to Alignment Revision (SW1C Part 2)

As discussed above, our September 18, 2014 proposal provided for the design of the pipeline in Hughes Avenue instead of Whitesbridge Avenue. The geotechnical investigation and the Phase 1 Environmental Site Assessment (ESA) had already been completed for the original Project SW1C alignment. Having realized the oversight as the project progressed, this proposal includes additional geotechnical investigation and Phase 1 ESA work required for the rerouting of the recycled water transmission main down Hughes Avenue. Additionally, Hughes Avenue between Roeding Drive and State

Route 180 has been reconstructed, the cul-de-sac on Hughes Avenue just north of State Route 180 has been removed, and an intersection with Dan Ronquillo Drive has been created subsequent to already-completed project surveying and mapping efforts. These changes in topography require resurveying of this area. Each of these items is discussed in the following paragraphs:

1. For the geotechnical investigation, we will perform a total of eleven borings, with six of them being extended to 30 feet below ground surface for the three proposed jacking locations, and the remaining five being extended to 15 feet below ground surface. The samples will be analyzed and an addendum to the project geotechnical engineering report will be prepared, covering all testing and analyses included under our original scope.
2. For the Phase 1 ESA work, we will prepare a Phase 1 ESA report for the revised route to identify recognized environmental conditions.
3. For the topographic survey, new roadway and utility improvements will be surveyed along Hughes Avenue between Roeding Drive and Dan Ronquillo Drive and incorporated into the plans. Aerial photography will be obtained from online sources and also incorporated into the plans.

C. Temporary Traffic Control Plan Preparation (SW1C Parts 2 and 3 and SW1D & SW4)

The original scope of work included the preparation of a matrix to be included in the contract specifications that provides general requirements and guidance for the construction contractor as to what streets may be fully or partially closed, the dates or times in which certain closures may be implemented, and other similar information. The construction contractor would then prepare his own detailed temporary traffic control (TTC) plans, implementing the general requirements and guidance provided in the construction documents. The contractor's detailed TTC plans, as reviewed and approved by the City, would then be implemented during construction.

Recent City policy has evolved to include preparation of fully featured, detailed traffic control plans during project design that can be directly implemented by the contractor. The City has directed that the plans and specifications for SW1C Parts 2 and 3 and SW1D & SW4 include detailed traffic control plans and specifications that may be directly implemented by the contractor during construction. As is the general case for other construction document content, the contractor will retain the option to submit proposed revised or alternative traffic control plans for review, approval, and implementation, should the contractor so desire. The TTC plans will consist of the following:

1. We estimate a total of 61 separate temporary traffic control plans, which equates to approximately 100 sheets. 60%, 90%, and final plans and specifications will be prepared and submitted, and related comments will be addressed after each submittal.
2. Bidding and construction support services will be provided for the TTC plans.

D. Revise Route through Roeding Park, along Dennett Avenue, and along Palm Avenue (SW1C Part 3 and SW1D & SW4)

Has been determined that the City's proposed master-planned 24-inch recycled water transmission main (RWTM) will not be able to be installed in Belmont Avenue across the high-speed train (HST). As a result of this, different routes were developed that have the new RWTM cross the HST somewhere between Belmont and Olive Avenues, and south of Belmont Avenue in a utility bridge. The City ultimately chose the route that crosses Roeding Park approximately along the Dennett Avenue alignment, and continues easterly along Dennett Avenue to Palm Avenue, then southerly along Palm Avenue to Belmont Avenue. The proposed route represents 8,231 linear feet (1.56 miles) of new RWTM design, which is a net increase of approximately 1,790 linear feet of RWTM over the master-planned route.

The reroute will require additional geotechnical investigation, an update to the environmental documents, additional topographic surveying, right-of-way research, utility research, and bidding and construction support services for the extra length of pipeline. Each of these items is discussed in the following paragraphs:

1. An additional geotechnical investigation, consisting of 10 new borings and related laboratory work, will be performed, and an addendum to the project geotechnical engineering investigation report will be prepared.
2. A Phase 1 Environmental Site Assessment (ESA) will be prepared, and the existing Phase 1 ESA report will be updated to reflect the new route.
3. An addendum will be prepared for the existing Adopted Tiered Mitigated Negative Declaration, including required biological and cultural resource studies. The addendum will be circulated for the required 15 days in support of the City's application for SRF funds. Also, SRF-related biological and cultural resource documents will be updated.
4. Topographic surveys will be performed along the new route. Aerial photography will be obtained from online sources and also incorporated into the plans.
5. Required field and office surveying will be performed to establish the Golden State Boulevard and Dennett and Palm Avenues rights-of-way.
6. Utility research will be performed for the route.
7. The project plans, which have already been prepared for the master-planned route, will be revised to incorporate the new route.
8. Bidding and construction support services will be provided for the extra length of RWTM beyond the length in the original scope of work.

E. Additional Potholing (SW1C Parts 1 and 2 and SW1D & SW4)

The original scope for the project includes an allowance for utility pothole excavations at 80 locations. As of the date of this proposal, a total of 41 potholes have been used for SW1A, SW1B, and SW1C (Part 1), leaving a remainder of 39 potholes. Now that the initial utility research has been completed, we are able to estimate the required potholes

to finish design of the remaining pipelines that have pipe sizes of 24-inch or greater (no potholes are proposed for pipes smaller than 24-inch). We estimate that a total of 211 potholes are required to finish SW1C (Parts 2 and 3), SW1D, and SW4. Since 39 potholes remain, there are a total of 172 required potholes that are not included in our scope. The scope states that if more than the 80 included potholes are required, an amendment may be necessary.

Based on our previous water pipeline projects, it is our experience that as potholing progresses for a project it usually leads to the need for additional potholes that were not initially accounted for. This is due to the additional information that potholing produces, both through USA paint marks that are provided by the utility owners during potholing, as well as the additional utilities that are discovered during related geophysical surveys. Accordingly, we suggest that a total of 190 potholes be added to the scope. The work includes the actual potholing, surveying of the pothole location, and interpretation of the pothole results.

F. Realignment through Broadway Plaza (SW4)

The recycled water master plan shows the RWTM along H Street across Fresno Street and northeast up Fresno Street from H Street. This location is currently the Fresno Street Subway, and the CHSRA has plans to remove the Fresno Street Subway and construct an at-grade intersection. This CHSRA work is not scheduled to be completed by the time the RWTM needs to be constructed, so another route was chosen. The selected route is the Fresno/Merced Alley between H Street and Broadway Plaza, along Broadway Plaza to Mariposa Street, and along Mariposa Street to H Street.

The reroute will require an update to the environmental documents, additional topographic surveying, right-of-way research, utility research, plan and profile preparation, and bidding and construction support services. Each of these items is discussed in the following paragraphs:

1. A Phase 1 Environmental Site Assessment (ESA) will be prepared, and the existing Phase 1 ESA report will be updated to reflect the new route.
2. An addendum will be prepared for the existing Adopted Tiered Mitigated Negative Declaration, including required biological and cultural resource studies. The addendum will be circulated for the required 15 days in support of the City's application for SRF funds. No field work is included for biological and cultural resources, and it is not expected to be required.
3. Topographic surveys will be performed along the new route. Aerial photography will be obtained from online sources and also incorporated into the plans.
4. Required field and office surveying will be performed to establish the Merced/Fresno Alley, Broadway Plaza, and Mariposa Street rights-of-way.
5. Utility research will be performed for the route.
6. The project plans, which have already been prepared for the master-planned route, will be revised to incorporate the new route, and new sheets will be prepared as required.

7. Bidding and construction support services will be provided for the extra length of RWTM beyond the length in the original scope of work.

SECOND AMENDMENT TO AGREEMENT

THIS SECOND AMENDMENT TO AGREEMENT (Amendment) made and entered into as of this 12 day of January, 2017, amends the Agreement entered into between the CITY OF FRESNO, a California municipal corporation ("CITY"), and Blair, Church and Flynn Consulting Engineers, a California Corporation ("CONSULTANT").

RECITALS

WHEREAS, CITY and CONSULTANT entered into an agreement, dated July 2, 2013, in the amount of \$3,324,000 for professional engineering services for the design of the Recycled Water Distribution System Design, Southwest Quadrant ("Agreement"); and

WHEREAS, the First Amendment to the Agreement was executed on June 30, 2016 in the amount of \$674,240 and

WHEREAS, CITY desires to modify the Agreement to include splitting up project Southwest 1C2, Southwest 1C3, Southwest 1D & Southwest 4 into two separate sets of construction document; and

WHEREAS, City desires to modify final pipe alignments to accommodate newly identify users along Franklin Ave and Fresno Street and

WHEREAS, CITY desires to modify the Agreement to provide additional environmental work, topographic surveying, utilities research, right-of-way mapping and plan and profile preparation; and

WHEREAS, CITY received Environmental comments after the expiration of the comment period from the State Water Resource Control Board to update the cultural figures to depict the new alignments in relation to identified historic places and

WHEREAS, CITY desires to add Environmental work addressing late comments on the Addendum to the Adopted Tiered Mitigated Negative Declaration; and

WHEREAS, due to the need for additional services, the parties desire to increase the total compensation by an additional \$141,540.00 to complete the expanded Scope of Work; and

WHEREAS, with entry into this Amendment, CONSULTANT agrees that CONSULTANT has no claim, demands, or disputes against CITY.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and premises hereinafter contained, to be kept and performed by the respective parties, the parties agree that the aforesaid Agreement be amended as follows:

1. CONSULTANT shall provide additional services as described in **Exhibit 1**, attached hereto and incorporated herein by reference.
2. Exhibit A of the Agreement is amended to add the additional professional scope of services in **Exhibit 1**, attached hereto and incorporated herein by reference.
3. Section 3(a) of the Agreement dated July 2, 2013 is amended in its entirety to read as follows:


"(a) 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 \$4,139,780 and a contingency amount not to exceed \$100,000 for any additional work rendered pursuant to Subsection (d) below and authorized in writing by the Director."

4. In the event of any conflict between the body of this Amendment and any Exhibit or Attachment hereto, the terms and conditions of the body of this Amendment 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 or restate any terms or conditions, or modify the allocation of risk between the parties, provided for within the body of this Amendment or the body of the Agreement, shall be null and void.

5. Except as otherwise provided herein, the Agreement remains in full force and effect.

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

CITY OF FRESNO,
a California municipal corporation

By: 
Thomas C. Esqueda, Director
Department of Public Utilities

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By:  1/20/17
Deputy

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney


By:  1/5/17
Brandon M. Collet Date
Deputy City Attorney

Attachment: Exhibit 1

Blair, Church & Flynn Consulting Engineers,
a California corporation

By: 
Name: Karl E. Kienow

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

By: 
Name: Adam K. Holt

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

EXHIBIT 1

ADDITIONAL PROFESSIONAL SERVICES

Blair, Church & Flynn Consulting Engineers prepared and submitted a proposal for additional professional services for Projects SW1A, 1B, 1C, 1D & 4, and PS1 to the City of Fresno on 18 September 2014. Among other items, the proposal included extra costs for rerouting the Project SW1C pipeline down Hughes Avenue instead of Nielsen Avenue, and rerouting the Project SW1B pipeline down Blythe Avenue instead of Whitesbridge Avenue. The proposal was accepted by the City with payment through the contingency item on the purchase order. Some of the work remains underway, and some has been completed.

We also prepared and submitted a proposal for additional professional services for Projects SW1A, 1C, 1D & 4, and PS1 to the City of Fresno on 17 May 2016. This proposal included work related to the new pump station site; pipelines to the new pump station site; Hughes Avenue pipeline revisions; the preparation of temporary traffic control plans; Roeding Park, Dennett Avenue, and Palm Avenue pipeline revisions; additional potholing; and the Broadway Plaza pipe realignment. The proposal also defined Project SW1C as the pipeline in Belmont Avenue from Marks Avenue into Roeding Park; Project SW1C2 as the pipeline in Hughes Avenue from Belmont Avenue to Whitesbridge Avenue, and in Whitesbridge Avenue from Hughes Avenue to Trinity Street; and Project SW1C3 as the pipeline that leaves Roeding Park along Dennett Avenue to Palm Avenue, and in Palm Avenue to H Street. The proposal was accepted by the City, and was processed as a change order to the original agreement on 30 June 2016.

Additional work beyond that discussed above and that is not included in our scope is now required for the project, and this letter presents our proposal for those additional professional services for various parts of the Southwest Quadrant of the recycled water system.

Scope of Services

A. Work Required to Split Project SW1C2, SW1C3, SW1D & SW4 into Two Separate Sets of Construction Documents (SW1C2, SW1C3, SW1D & SW4)

Under the original agreement, Project SW1D & SW4 were to be one set of construction documents, intended to be bid and constructed under one construction contract. After Project SW1C was shortened, the City determined that the combined Projects SW1C2, SW1C3, SW1D & SW4 would be too big to bid as one, and requested that it be split into two. The decision was made to combine Projects SW1D and SW1C2 into one set of construction documents, and Projects SW1C3 and SW4 into another.

The split requires the preparation of several additional plan sheets, an additional set of specifications and cost estimate, and additional bidding and construction support services. Each of these items is discussed in the following paragraphs:

1. For the plan revisions, we will prepare additional cover, index, and detail sheets, and modify the already-prepared cover, index, and detail sheets as required for the two separate sets of construction documents. This includes the removal of all steel pipe details from the construction documents for Projects SW1C3 and SW4.
2. For the specifications, we will prepare an additional set of specifications and modify the already-prepared set of specifications as required for the two separate sets of construction documents. This includes the removal of all steel pipe sections from the construction documents for Projects SW1C3 and SW4.
3. For the cost estimates, we will prepare an additional cost estimate, and modify the already-prepared cost estimate as required for the two separate sets of construction documents.
4. For the bidding services, our current agreement includes attending a prebid conference, preparing addenda, and attending a bid opening for one construction contract. We will attend an additional prebid conference, prepare additional addenda, and attend an additional bid opening for the additional construction contract.
5. For the construction support services, our current agreement includes attending a preconstruction conference, reviewing shop drawings and other submittals, providing general consultation and advice, responding to requests for information (RFIs), providing periodic worksite observation, and preparing record drawings for one construction contract. We will attend an additional preconstruction conference, review additional shop drawings and other submittals, provide additional general consultation and advice, respond to additional requests for information (RFIs), provide additional periodic worksite observation, and prepare additional record drawings for the additional construction contract.

B. Additional Pipeline in Fresno Street (SW4)

The Fresno Street pipeline in the original agreement extended to the northeast just past S Street. The City directed that the pipeline be extended further to the northeast to the intersection of Fresno Street and Illinois Street. The extension of the pipeline requires additional environmental work, topographic surveying, additional right-of-way mapping, additional utility search, and plan and profile preparation. Each of these items is discussed in the following paragraphs:

1. An addendum will be prepared for the existing Adopted Tiered Mitigated Negative Declaration, including required biological and cultural resource studies. The addendum will be circulated for the required 15 days in support of the City's application for SRF funds. Also, SRF-related biological and cultural resource documents will be updated.

2. Topographic surveys will be performed along the new route. Aerial photography will be obtained from online sources and also incorporated into the plans
3. Required field and office surveying will be performed to establish the Fresno Street right-of-way.
4. Utility research will be performed for the route.
5. The already-prepared plan and profile drawings will be modified, and new plan and profile drawings will be prepared as required, to accommodate the new route.
6. Bidding and construction support services will be provided for the extra length of pipeline in Fresno Street.

C. Additional Pipeline in Franklin Avenue (SW1C2)

During negotiations with recycled water users, the City determined that several of the cemeteries southeast of the intersection of Belmont and Hughes Avenues were interested in using the water. It was then determined that the best way to serve the cemeteries is to construct a pipeline in Franklin Avenue from Hughes Avenue to approximately 1,400 feet east of Hughes Avenue. A public utility easement will be required; scope and fees for the easement are not included in this proposal and will be provided under the original agreement. The additional pipeline in Franklin Avenue requires additional environmental work, topographic surveying, additional utility search, and plan and profile preparation. Each of these items is discussed in the following paragraphs:

1. An addendum will be prepared for the existing Adopted Tiered Mitigated Negative Declaration, including required biological and cultural resource studies. The addendum will be circulated for the required 15 days in support of the City's application for SRF funds. Also, SRF-related biological and cultural resource documents will be updated.
2. Topographic surveys will be performed along the new route. Aerial photography will be obtained from online sources and also incorporated into the plans.
3. Utility research will be performed for the route.
4. New plan and profile drawings will be prepared as required to accommodate the new route.
5. Bidding and construction support services will be provided for the new pipeline.

D. Additional Environmental Work to Address Late Comments on the Addendum to the Adopted Tiered Negative Declaration (SW1C2, SW1C3, and SW4)

The proposal for additional professional services dated 17 May 2016 discussed above included the necessary environmental work to prepare an addendum to the adopted

tiered mitigated negative declaration (MND) for the project. As required, the addendum was posted and circulated for comments. After the expiration of the comment period, comments were received from the State Water Resources Control Board (SWRCB). According to law, the comments do not need to be addressed. However, since the project funding is provided by the SWRCB, they require that the comments be addressed.

As requested by the SWRCB, the cultural figures in the addendum will be updated to depict the new alignments in relation to identified historic places, and an erratum will be prepared to analyze the revised pipeline alignment along Palm Avenue from Franklin Avenue to North H.

THIRD AMENDMENT TO AGREEMENT

THIS THIRD AMENDMENT TO AGREEMENT (Amendment) made and entered into as of this 1st day of September, 2017, amends the Agreement entered into between the CITY OF FRESNO, a California municipal corporation (CITY), and Blair, Church and Flynn Consulting Engineers, a California Corporation (CONSULTANT).

RECITALS

WHEREAS, CITY and CONSULTANT entered into an agreement, dated July 2, 2013, in the amount of \$3,324,000 for professional engineering services for the design of the Recycled Water Distribution System Design, Southwest Quadrant (Agreement); and

WHEREAS, the First Amendment to the Agreement was executed on June 30, 2016, in the amount of \$674,240 and

WHEREAS, the Second Amendment to the Agreement was executed on January 12, 2017, in the amount of \$141,540 and

WHEREAS, CITY desires to realign projects SW1C3 & SW4 to use a different pipeline route for the conveyance of recycled water to the downtown area and the southeast than what is included in the recycled water master plan; and

WHEREAS, City desires to design a chlorination facility at the Regional Wastewater Reclamation Facility; and

WHEREAS, CITY desires to add Environmental work addressing several revisions to the Recycled Water Transmission Main alignments and pump station location on the Addendum to the Adopted Tiered Mitigation Negative Declaration; and

WHEREAS, CITY desires to design a potable water main along Franklin Avenue and conform contract document preparation for SW1C2 and SW4 projects; and

WHEREAS, due to the need for additional services, the parties desire to increase the total compensation by an additional \$940,280.00 to complete the expanded Scope of Work; and

WHEREAS, with entry into this Amendment, CONSULTANT agrees that CONSULTANT has no claim, demands, or disputes against CITY.

AGREEMENT


NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and premises hereinafter contained, to be kept and performed by the respective parties, the parties agree that the aforesaid Agreement be amended as follows:

1. CONSULTANT shall provide additional services as described in **Exhibit 1**, attached hereto and incorporated herein by reference.


2. Exhibit A of the Agreement is amended to add the additional professional scope of services in **Exhibit 1**, attached hereto and incorporated herein by reference.

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

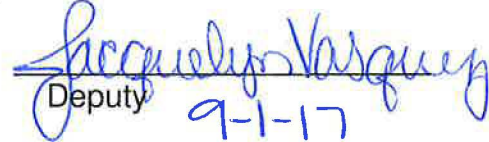
CITY OF FRESNO,
a California municipal corporation

By: 
Thomas C. Esqueda, Director
Department of Public Utilities

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By:  8/8/17
Brandon M. Collet Date
Deputy City Attorney

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: 
Deputy 9-1-17

Attachment: Exhibit 1

Blair, Church & Flynn Consulting Engineers,
a California corporation

By: 
Name: Karl E. Kienow

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

By: 
Name: Adam K. Holt

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

EXHIBIT 1

ADDITIONAL PROFESSIONAL SERVICES

Blair, Church & Flynn Consulting Engineers prepared and submitted a proposal for additional professional services for Projects SW1A, 1B, 1C, 1D & 4, and PS1 to the City of Fresno on 18 September 2014. Among other items, the proposal included extra costs for rerouting the Project SW1C pipeline down Hughes Avenue instead of Nielsen Avenue, and rerouting the Project SW1B pipeline down Blythe Avenue instead of Whitesbridge Avenue. The proposal was accepted by the City with payment through the contingency item on the purchase order. Some of the work remains underway, and some has been completed.

We also prepared and submitted a proposal for additional professional services for Projects SW1A, 1C, 1D & 4, and PS1 to the City of Fresno on 17 May 2016. This proposal included work related to the new pump station site; pipelines to the new pump station site; Hughes Avenue pipeline revisions; the preparation of temporary traffic control plans; Roeding Park, Dennett Avenue, and Palm Avenue pipeline revisions; additional potholing; and the Broadway Plaza pipe realignment. The proposal also defined Project SW1C as the pipeline in Belmont Avenue from Marks Avenue into Roeding Park; Project SW1C2 as the pipeline in Hughes Avenue from Belmont Avenue to Whitesbridge Avenue, and in Whitesbridge Avenue from Hughes Avenue to Trinity Street; and Project SW1C3 as the pipeline that leaves Roeding Park along Dennett Avenue to Palm Avenue, and in Palm Avenue to H Street. The proposal was accepted by the City, and was processed as an amendment to the original agreement on 30 June 2016 (Amendment No. 1).

We also prepared and submitted a proposal for additional professional services for Projects SW1C2, SW1C3, SW1D, and SW4 to the City of Fresno on 31 October 2016. This proposal included work related to splitting the construction documents that contained SW1C2, SW1C3, SW1D, and SW4 into two separate sets of construction documents; additional pipeline in Fresno Street for the hospital; additional pipeline in Franklin Avenue to serve additional cemeteries; and to address late comments on the addendum to the adopted tiered mitigated negative declaration from the State Water Resources Control Board. The proposal was accepted by the City, and was processed as an amendment to the original agreement on 12 January 2017 (Amendment No. 2).

The City also directed that Project SW1C2 and SW1D be split into two separate sets of construction documents, and directed that the construction budget for Projects SW1D and SW4 be used for the design. This work has been completed.

Other City direction required that the 12-inch recycled water main in Whitesbridge Avenue east of Fruit Avenue and in Trinity Street be upsized to 24-inch. The fees for this work are estimated to be \$6,500, and this work has been invoiced against the construction services fees for Project SW1D that were included in the amendment dated 12 January 2017. This work has also been completed.

Additional work beyond that discussed above and that is not included in our scope or any of the amendments is now required for the project, and this letter presents our proposal for those additional professional services for various parts of the Southwest Quadrant of the recycled water system.

A. Work Required to Realign Projects SW1C3 & SW4

The City wishes to use a different pipeline route for the conveyance of recycled water to the downtown area and the southeast than what is included in the master plan. The proposed alignment continues Project SW1C2 south along Trinity Street to Kearney Boulevard, east along Kearney Boulevard to A Street, southeast along A Street to Inyo Street, and northeast along Inyo Street to H Street with a 24-inch recycled water transmission main (RWTM). Additionally, a 4-inch recycled water main (RWM) will be included in Fresno Street from A Street to the State Route 99 right-of-way, and an 8-inch RWM in Divisadero Street from Fresno Street to the State Route 41 right-of-way. The recycled water main in Broadway Street from Fresno Street to Mariposa Street, and in Mariposa Street from Broadway Street to H Street will remain in the project, except that the 24-inch RWTM will be changed to a 12-inch RWM. The 12-inch RWM along Fresno Street from Broadway Street to Illinois Avenue will remain in the project, and related design work is included under the original agreement and Amendment No. 2.

The 24-inch RWTM from Roeding Park to the intersection of Merced and Broadway Streets will be removed from the project, as well as the 24-inch RWTM from the intersection of H and Inyo Streets to the southeast. This work is part of Projects SW1C3 and SW4 which, as of the date of this proposal, have been designed to 90% completion.

In total, the project consists of the following:

Pipeline Reach	Current Size	Proposed Size	Length
New pipeline along Trinity, Kearney, A, and Inyo	N/A	24-inch	1.51 miles
New pipeline along Fresno Street southwest of SR99	N/A	4-inch	0.2 miles
New pipeline along Divisadero Street	N/A	8-inch	0.23 miles
Pipeline along Fresno Street that is part of original agreement	12-inch	12-inch	0.96 miles
Pipeline along Broadway, Mariposa, and H that is part of original agreement that is to be revised	24-inch	12-inch	0.43 miles

Schematic Design Phase

Topographic surveys shall be accomplished using a combination of conventional ground surveys and aerial photogrammetric methods. Aerial photogrammetric methods shall be

used to provide general topographic and photographic coverage along the pipeline alignments. Where aerial photogrammetric methods cannot provide the coverage or level of detail necessary to fully support pipeline design efforts, conventional ground survey methods shall be utilized for infill topographic surveys. Similarly, conventional ground survey methods shall be used to measure flowline elevations in manholes, to locate underground utility facilities exposed as part of pothole utility location operations, and to locate utility markings placed in connection with Underground Service Alert (USA) or "811" notifications.

A geotechnical investigation shall be conducted along the pipeline alignments. Borings for pipeline alignments shall be done at intervals of 1/4 mile or less, and at each end of each bore-and-jack location, and shall extend to a depth of five feet below the proposed bottom of pipe. Laboratory testing shall include gradation, moisture-density, shear, corrosivity, and resistivity analyses. A geotechnical report shall be prepared to document the investigation, and shall include pipe bedding and foundation recommendations.

During the Schematic Design Phase and throughout the entire design, bi-weekly meetings shall be held with City personnel to present in-progress efforts and to solicit input as to City preferences for the various elements of the project.

Addendum No. 2 for the existing Adopted Tiered Mitigated Negative Declaration is currently being prepared to address project changes that were made through earlier project amendments. The in-process addendum will be revised to include the new project alignments. The cultural resources figures will be updated to depict the new alignments in relation to identified historic places.

The existing 24-inch RWTM in Broadway Street from Fresno Street to Mariposa Street and in Mariposa Street from Broadway Street will be changed to a 12-inch RWM, and the existing 90% plans will be updated accordingly.

The Schematic Design Phase shall culminate in the submittal of a Schematic Design Report addressing the various issues expected to influence project design, including utility research findings, pipeline alignments, results of geotechnical investigations, potential conflicts with existing facilities, and additional environmental review. The report shall include recommendations for features to be implemented in subsequent design development and construction document phases, including pipeline alignment, pipe material, and construction method recommendations. The geotechnical investigation report and the addendum to the Adopted Tiered Mitigated Negative Declaration shall be appended to the Schematic Design Report.

The Schematic Design Report shall include schematic plans (approximately 30% design completion) at reduced scale, together with construction cost estimates. Schematic plans shall include topographic survey results, aerial photography, utility research results, and existing rights-of-way and easements. For all of the pipelines, schematic plans shall also include sufficient design information to clearly establish proposed

pipeline sizes and alignments. Pipeline profiles will not be included in the schematic plans.

Existing utilities along the project alignments shall be designated during the Schematic Design Phase as discussed below. The designated utilities will be incorporated into the schematic plans.

Design Development Phase

The Design Development Phase shall include the preparation and submittal of preliminary plans, specifications, and estimates (approximately 60% design completion), incorporating the recommendations of the Schematic Design Phase as approved by the City. The Design Development Phase shall also include the preparation of legal descriptions and acquisition diagrams in support of the City's efforts for the acquisition of necessary easements and rights-of-way.

A corrosion monitoring system will be designed and appropriate details included in the plans. The corrosion monitoring system will only be designed for the 24-inch pipeline.

After review and approval of the schematic plans, the locations of required pothole excavations for utility locating shall be determined and performed. See the discussion below.

Construction Document Phase

The Construction Document Phase shall include the preparation and submittal of plans, specifications and estimates at the draft final (approximately 90% design completion) and final (100% complete) stages of completion. At each submittal stage, review comments resulting from the prior submittal shall be thoroughly addressed.

Utility Designating and Locating

Utility depiction on the plans will conform to ASCE Standard 38-02, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data. During the schematic design, utility companies and agencies expected to have utilities on the project area will be contacted, and a base map will be prepared using the topographic mapping and the utility search results. Utilities obtained from records are considered Quality Level D (QL-D), and utilities obtained from field surveys and measurements at manholes are considered QL-C. After base map preparation, designation of existing utilities along the project alignments shall consist of the following:

- Designate conductive utilities with direct connection or passive induction locating equipment.
- Sonde storm drains and sewers as needed (if permitted) when alignment is questionable.
- Sweep the area for unknown utilities using:

- Tandem passive induction
- Radio and power signature scanning
- Ground Penetrating Radar (GPR)
- Unknown utilities will be traced to source, if possible
- Designated utilities will be marked in the field with pink paint
- These designated utilities are considered QL-B, and consist of horizontal location only, and may have rough depths (with an unknown and varying accuracy).

Based on an analysis of other pipelines project recently done for the City, it is estimated that 85 potholes will be required for these pipelines. These potholes will serve to locate the utilities (provide both horizontal and vertical locations) and after potholing, they will be considered QL-A.

Both the designating and the potholing will require traffic control plans and related traffic control, and these will be provided as required.

High Speed Rail and Union Pacific Railroad Crossing

The proposed alignment crosses both the High Speed Rail (HSR) and the Union Pacific Railroad (UPRR) between G and H Streets. Both of these railroads require that the new recycled water main be installed in a steel casing across the railroad rights-of-way. A meeting was held with a representative of HSR and the City on 6 April 2017, and it was decided that the steel casing across both HSR and UPRR will be constructed by HSR, and the construction plans for the casing should be done on a City titleblock, and not an HSR titleblock. Accordingly, the casing will be designed on a City titleblock for TPZP use, and shown in the RWTM plans as “by others.” No HSR permit will be required, but it is expected that the City will need to sign some type of agreement with HSR. The new steel casing will be jacked and bored under UPRR, and placed via open cut across HSR. An agreement with UPRR will be obtained to allow the installation of the new pipeline in the casing to be installed by TPZP.

Scope of Services

The following Scope of Services outline describes the services we propose to provide to the City of Fresno for the project.

I. SCHEMATIC DESIGN PHASE

A. PROGRAMMING AND PROJECT MANAGEMENT

1. Prepare and maintain design schedule
2. Prepare and submit monthly progress and budget reports
3. Attend biweekly design meetings throughout duration of design

- a) Sixteen meetings of four hours each attended by the project manager and the engineer are included.

B. SURVEYING, AERIAL PHOTOGRAPHY AND MAPPING

1. Provide traffic control for surveys
2. Conduct horizontal and vertical ground control surveys
3. Obtain and incorporate aerial photography
4. Obtain and incorporate photogrammetric topographic mapping
5. Conduct infill topographic ground surveys
 - a) Use conventional ground survey methods

C. ENVIRONMENTAL SERVICES

1. Perform cultural resource studies
2. Update the already-existing cultural resource figures in Addendum No. 2
3. Assist the City with updates to the Financial Assistance Program application documents as required
4. Submit to City for review and comment
5. Prepare final addendum to the adopted Tiered Mitigated Negative Declaration (MND) and obtain approval

D. GEOTECHNICAL SERVICES

1. Conduct geotechnical investigation
 - a) Borings at intervals of 1/4 mile or less for pipeline alignments
 - b) One boring at each end of each bore-and-jack location
 - c) A total of 11 borings will be performed
2. Prepare geotechnical report
 - a) Include pipe bedding and foundation recommendations
 - b) Include trench configuration and trench safety recommendations

E. SCHEMATIC DESIGN REPORT

1. Conduct site investigations
2. Conduct public street, property line & OPL research
3. Coordinate with Caltrans staff for crossings of State right-of-way
4. Coordinate with railroad companies for rail crossings
5. Conduct utility search
6. Prepare utility basemap for use during designating
7. Designate utilities along project alignments

8. Survey designated utilities
9. Update utility basemap
10. Prepare schematic (30%) plans
11. Revise Broadway, Mariposa, and H Street for smaller pipe size
12. Prepare itemized estimates of quantities and cost
13. Prepare outline technical specifications
14. Prepare schematic design report, incorporating:
 - a) Topographic surveys
 - b) Geotechnical investigation
 - c) Addendum to the Tiered MND
 - d) Utility investigation findings
 - e) Material and equipment recommendations
 - f) Construction method recommendations
 - g) Schematic plans
15. Submit schematic design report

II. DESIGN DEVELOPMENT PHASE

A. PRELIMINARY PLANS, SPECIFICATIONS AND ESTIMATES

1. Prepare preliminary cover and index sheets
2. Prepare preliminary plan and profile drawings
3. Prepare preliminary construction detail drawings
4. Prepare preliminary pipeline corrosion monitoring detail drawings
5. Prepare preliminary temporary traffic control plans
6. Prepare preliminary traffic signal loop detector reconstruction plans
7. Prepare and submit underground classification applications
8. Prepare legal descriptions and diagrams for acquisition of easements and rights-of-way
 - a) Up to five different acquisitions
9. Prepare preliminary technical specifications
10. Prepare itemized estimate of quantities and cost
11. Address schematic design review comments
12. Submit preliminary (60%) plans, specifications and estimate

B. UTILITY AND RAILROAD COORDINATION

1. Prepare and submit railroad permit applications

- a) Coordinate with City and railroads through permit obtainment
- 2. Submit preliminary plans to affected companies, agencies & districts
- 3. Locate critical utility facilities by pothole excavation methods
 - a) Up to 85 locations
- 4. Coordinate relocation efforts with project design

C. AGENCY PERMIT COORDINATION

- 1. Prepare and submit Caltrans encroachment permit application
 - a) Obtain Caltrans encroachment permit
- 2. Prepare and submit San Joaquin Valley Air Pollution Control District (SJVAPCD) indirect source review (ISR) application
 - a) Obtain ISR approval and verify SJVAPCD air model calculations

III. CONSTRUCTION DOCUMENT PHASE

A. DRAFT FINAL DESIGN

- 1. Prepare draft final cover and index sheets
- 2. Prepare draft final plan and profile drawings
- 3. Prepare draft final construction detail drawings
- 4. Prepare draft final pipeline corrosion monitoring detail drawings
- 5. Prepare draft final temporary traffic control plans
- 6. Prepare draft final traffic signal loop detector reconstruction plans
- 7. Prepare draft final technical specifications
- 8. Incorporate city "boilerplate" documents
- 9. Prepare itemized estimates of quantities and cost
- 10. Address preliminary review comments
- 11. Submit draft final (90%) plans, specifications and estimates

B. FINAL PLANS, SPECIFICATIONS AND ESTIMATES

- 1. Prepare final plans
- 2. Prepare final specifications
- 3. Prepare final itemized estimates of quantities and cost
- 4. Address draft final review comments
- 5. Submit final (100%) plans, specifications and estimates

IV. BIDDING PHASE

A. BID SERVICES

1. Attend pre-bid conferences
2. Prepare addenda and clarifications
3. Attend bid opening and evaluate bid proposals
4. Prepare conform plans and specifications, and provide the following:
 - a) 10 full-size bound sets of conform plans
 - b) 5 half-size bound sets of conform plans
 - c) 10 bound sets of conform specifications
 - d) PDFs of the conform plans and specifications

V. CONSTRUCTION PHASE AND GENERAL CONSTRUCTION CONTRACT ADMINISTRATION

A. CONSTRUCTION SERVICES

1. Attend pre-construction conference
2. Review shop drawings and other contractor submittals
 - a) Assume 40 submittals at 4 hours each and 25 resubmittals at 2 hours each
3. Review and provide technical information to City for contractor change orders
 - a) Assume 40 hours total
4. Respond to requests for information (RFIs)
 - a) Assume 15 RFIs at 8 hours each
5. Provide periodic worksite observation
 - a) Assume 4 site visits at 3 hours each
6. Prepare record drawings
 - a) Assume 15 sheets at two hours of CAD time per sheet and one hour of engineering time per drawing

Assumptions

1. Preparation of construction documents will result in one set of construction contract documents for the project pipelines.
2. R-value testing of soils for pavement replacement design is not included as part of the Geotechnical Investigation.
3. The actual extent of utility location efforts by pothole excavation methods is as yet unknown. This Scope assumes that there will be utility pothole excavation at 85 locations. This assumption is based on our recent experience with current City of Fresno pipeline projects where the frequency of pothole excavation has been significantly greater than for older projects.
4. The City will obtain all preliminary title reports required in connection with the acquisition of easements and rights-of-way.

5. All City permits that will be required for design and construction activities will be issued by the City as no-fee permits.
6. City will pay all permit fees for permits that cover construction activities but must be obtained during the design process.
7. Construction contractor will pay all permit fees for permits that cover construction activities and are obtained by the contractor under the provisions of the construction contract.
8. For tasks that extend beyond the time limits of a particular Part of the agreement, the task is listed under the Part in which task activities will begin. For example, note that activities for Programming and Project Management, which is listed under Part 1, Schematic Design Phase, will extend throughout the duration all five parts of the agreement, until all work under the agreement is completed.
9. For all recent and current potable water and recycled water transmission main design and construction projects in and near the City of Fresno, it has been determined that no cathodic corrosion protection, whether sacrificial anode or impressed current in nature, was required at the time of installation. However, corrosion monitoring stations have been incorporated to allow for ongoing monitoring of corrosion potential. This Scope is based on the assumption that the same will hold true for these pipelines, such that corrosion monitoring stations will be included but cathodic protection systems will not.
10. This Scope does not include the preparation of Stormwater Pollution Prevention Plans (SWPPPs). The project specifications will require that the construction contractor prepare SWPPP documents.

B. Recycled Water Chlorination Facility at the Regional Wastewater Reclamation Facility

The City of Fresno plans to construct a chlorination facility that will store and inject chlorine (sodium hypochlorite) into the recycled water transmission main at a point just downstream of the recycled water pump station at the RWRP. Recycled water is produced by the newly constructed and commissioned Tertiary Treatment and Disinfection Facility (TTDF), which includes ultraviolet (UV) disinfection. The purpose of the chlorination facility is to allow the City to also provide disinfection by chlorination and maintain a chlorine residual in the recycled water if necessary. The design dosage is 1 mg/l.

It is anticipated that sodium hypochlorite storage will consist of two 4,000 gallon translucent poly tanks. The tanks will either be double-wall chemical containment tanks, or will be situated in a suitable basin for safe spill containment, or both, as determined through schematic design efforts. The storage facilities will include provisions for tank level indicators. The City will provide control system design for the chlorination facility, which may be incorporated in the project plans and specifications to be constructed as part of overall project construction, or may be constructed under separate arrangements made by the City.

A CMU building is planned for the storage and metering facilities. The building will have parapet walls, similar to the configuration of the TTDF electrical and blower building. The building is expected to be approximately 1,000 square feet in size, and will be provided with electrical power and interior and exterior lighting. Potable water will be provided, and an eye-

wash station with provisions for an alarm is to be included. One or two 12-foot wide roll-up doors will be provided, together with a single man entry door. No windows or skylights are planned. No heating or air conditioning facilities are planned, but the building will include either evaporative cooling or forced air ventilation. The building roof will be either lumber or steel framed, with roofing materials as determined through schematic design efforts. The exterior of the building will match the finish and color of the TTDF electrical and blower building.

It is anticipated that the chlorination facility will be sited near the recycled water pump station, and will be situated so as to remain clear of the area reserved for future pump station expansion. All weather access will be provided to the building for routine operation and maintenance, and for chemical deliveries.

The chlorination facility is planned to be designed to accommodate current (5 MGD) and buildout (30 MGD) configurations. The City of Fresno will make arrangements for the provision of electrical power, control circuits, and potable water to the building. The City will also make arrangements for the provision of the Parsons AutoCAD files for the recycled water pump station plans.

The City has indicated that it may be desired to include a chlorine measurement station at some point downstream of the chlorination facility injection point. Siting and configuration of a chlorine measurement station will be evaluated during the schematic design phase for the chlorination facility. However, subsequent design of a chlorine measurement station is not included beyond the level of schematic design evaluation. If the City wishes to include a chlorine measurement station in subsequent design phases for this project, the work could be done under an amendment for additional services, once the scope has been refined during schematic design phase efforts.

It is anticipated that there will be few or no existing utility facilities to contend with, other than City-owned RWRf utility facilities. Nevertheless, it is prudent to conduct customary utility investigations and notify those utility companies and agencies that may have facilities in the area, for verification efforts if nothing else. Project design efforts should include such utility investigations. However, it is not expected that it will be necessary to determine the locations of existing utility facilities by pothole excavation methods.

Scope of Services

The following Scope of Services outline describes the services we propose to provide to the City of Fresno for the project.

I. Schematic Design Phase

- A. Prepare and maintain design and construction schedule
- B. Participate in coordination meetings with City staff
 - 1. Throughout all project phases
- C. Conduct site investigations
- D. Conduct utility investigations

1. Prepare utility notification letters and send to affected utility companies and agencies
2. Prepare and submit utility search documentation
3. Submit schematic design drawings to affected utility companies and agencies for review
- E. Conduct chlorine measurement station evaluation
 1. Evaluate chlorine measurement options for a site located along the transmission main downstream of the chlorination facility and prepare related recommendations
- F. Obtain and incorporate available and applicable geotechnical investigation reports
 1. Provided by City
- G. Develop access plan for maintenance and chemical deliveries
 1. Use AutoTURN software for vehicle path analyses
- H. Prepare schematic design plans, specifications and estimates (30% PS&E)
 1. Sufficiently detailed to define scope and extent of proposed improvements
- I. Prepare Schematic Design Report, incorporating:
 1. Results of all schematic design phase efforts
 2. Chlorine measurement station evaluation
 3. Schematic design (30%) PS&E
- J. Submit Schematic Design Report to City for review
- K. Optional Supplemental Services
 1. Provide as needed services throughout project, upon approval or direction by the City
 2. Provide services on a time-and-materials basis, as approved by the City
 3. Deliverables as determined through City authorization
- II. Design Development Phase
 - A. Obtain and incorporate City's schematic design review comments
 - B. Prepare preliminary cover and index sheets
 - C. Prepare preliminary chlorination facility plans, to include:
 1. Site paving, grading and drainage plans
 2. Site utility plans
 3. Floor plan
 4. Roof plan
 5. Foundation plan

- 6. Exterior elevations
- 7. Building sections
- 8. Structural sections
- 9. Mechanical plans
- 10. Electrical plans

- a) Incorporate control system design information provided by City

- 11. Plumbing plans
- 12. Door and louver schedule

- D. Prepare preliminary construction details
- E. Prepare preliminary technical specifications
- F. Prepare preliminary construction cost estimate
- G. Coordinate with City Planning and Development
 - 1. Obtain review and necessary permits
 - 2. Application and permit fees paid by City
- H. Identify potential utility conflicts and relocation needs
 - 1. Meet with City staff to review
 - 2. Coordinate with utilities to facilitate relocations
 - 3. Submit necessary supporting documentation to utilities
- I. Submit design development (60%) PS&E to City for review

III. Construction Document Phase

- A. Obtain and incorporate City's design development review comments
- B. Prepare draft final cover and index sheets
- C. Prepare draft final chlorination facility plans, to include:
 - 1. All elements identified under Design Development Phase
- D. Prepare draft final construction details
- E. Prepare draft final technical specifications
- F. Prepare draft final construction cost estimate
- G. Submit draft final (100%) PS&E to City for review
- H. Obtain and incorporate City's final review comments
- I. Submit final (100%) PS&E to City for approval signatures

IV. Bidding Phase

- A. Attend pre-bid conference
- B. Respond to bid questions and prepare addenda if necessary
 - 1. Assume 12 bid question responses
 - 2. Assume two addenda
- C. Attend bid opening

V. Construction Phase and General Construction Contract Administration

- A. Attend pre-construction conference
- B. Review shop drawings and other contractor submittals
 - 1. Assume 30 shop drawing and submittal reviews
- C. Provide clarification of design documents during construction
 - 1. Assume 25 clarifications of design documents
- D. Review and provide technical information for construction contract change order requests
 - 1. Assume four change order requests.
- E. Provide periodic worksite observation
 - 1. Assume four site visits
- F. Prepare and submit record drawings

Services Outside of Scope

Services not included under our scope of work, but that may be provided upon request, include the following:

- 1. Environmental studies and investigations
- 2. Preparation of a Stormwater Pollution Prevention Plan
- 3. Topographic surveys
- 4. Boundary or property corner field surveys or preparation of records of survey
- 5. Preparation of bid documents other than the technical specifications and those sections of the special provisions that relate to this project
- 6. Design services related to the relocation of franchise utilities
- 7. Preparation of legal descriptions and diagrams for acquisition of easements and rights-of-way
- 8. Geotechnical investigations
- 9. Determination of utility facility locations by pothole excavation methods
- 10. Design of chlorination facility control systems, which will be provided by City

Anticipated Plan Sheets

It is expected that the project plans will consist of approximately 25 plan sheets. The following table provides a listing of anticipated plan sheets for design of the proposed chlorination facility.

Proposed Plan Sheets	
Description	Number
Cover Sheet	1
Index Sheet and General Notes	1
Site Paving, Grading and Drainage Plans	2
Site Utility Plans	1
Floor Plan	1
Roof Plan	1
Foundation Plan	1
Exterior Elevations	1
Building Sections	1
Structural Sections	2
Mechanical Plans	3
Electrical Plans	3
Plumbing Plans	2
Construction Details	5
Total Estimated Plan Sheets:	25

C. CEQA addendum revisions

Addendum No. 2 to the adopted Tiered Mitigated Negative Declaration (MND) for the Fresno Recycled Water Distribution system has been prepared that included several revisions to the RWTM alignments and pump station location. Addendum No. 2 has not been finalized yet due to the pending changes included in this proposal.

Biological and cultural resource surveys will be conducted and air quality emission estimates will be updated for the new recycled water route discussed under Item A of this proposal. The already-prepared Addendum No. 2 will be updated as required for the new recycled water route.

The recycled water system is intended to provide service to Belmont Memorial Park cemetery, which is along the north side of Nielsen Avenue, east of Hughes Avenue. The

service for the park is along the north side of Nielsen Avenue, just east of FID's Houghton Canal. Due to the road geometry where Nielsen Avenue crosses the canal, and the presence of several large-diameter gas and water mains in Nielsen Avenue, the pipeline to serve the cemetery will be routed through a utility easement on the north side of Nielsen Avenue. Biological and cultural resource surveys will be conducted, air quality emission estimates will be updated, and Addendum No. 2 will be updated for Nielsen Avenue and the utility easement.

D. Project SW1C2 Additional Services

Recycled water Project SW1C2 is currently bidding. The City has requested that a water main be designed in Franklin Avenue, and conform contract documents be prepared. Additionally, the construction support services that were included for Project SW1C2 in Amendment No. 2 are being removed, and replacement construction support services are being added.

Franklin Avenue Water Main

A recycled water main was originally designed for Franklin Avenue east of Hughes within the cemeteries and included in Project SW1C2; however, the City was unable to obtain the required easement in time due to the required CEQA so the RWM was removed from the project. The required CEQA work is underway and will be included in the forthcoming Addendum No. 2 for the MND. The City has subsequently determined that a potable water main should also be designed and constructed in Franklin Avenue along with the RWM. The potable water main should be designed in Franklin Avenue from Hughes Avenue to Parkway Drive, and in Parkway Drive from Franklin Avenue to Belmont Avenue. The potable water main will be connected to the existing water mains in Hughes and Belmont Avenues. It is understood that the City hopes to have both the already-designed RWM and the potable water main constructed by the Project SW1C2 contractor.

The following services will be provided:

1. Potable water main size and water service locations shall be determined through coordination with the cemeteries and the City. The water main and services are expected to serve bathrooms and drinking fountains in the cemeteries.
2. Topographic surveying will be performed from the eastern limits of the proposed RWM to the intersection of Franklin Avenue and Parkway Drive, and along Parkway Drive between Franklin Avenue and Belmont Avenue.
3. The already-prepared legal description will be revised to incorporate the additional required easement in Franklin Avenue and Parkway Drive.
4. The potable water main will be added to the already-prepared plan and profile sheet that includes the RWM, and an additional plan and profile sheet will be prepared that includes the new topographic surveying and the proposed

potable water main continuing easterly in Franklin Avenue to Parkway Drive, and then northerly in Parkway Drive to Belmont Avenue. The revised plans will be submitted for City review.

5. Comments will be addressed, and the plan and profile sheets will be provided to the City to use as a contract change order for the SW1C2 project.

Conform Contract Documents

There have been several addenda issued that have modified both the plans and the specifications. Conform plans and specifications shall be prepared that modify the as-bid plans and specifications to incorporate all applicable addenda content.

The following will be provided:

1. 10 full-size bound sets of conform plans
2. 5 half-size bound sets of conform plans
3. 10 bound sets of conform specifications
4. PDFs of the conform plans and specifications

Additional Construction Support Services

When the scope and fees for the recycled water projects were initially determined, the City's Construction Management Division was expected to perform the construction management services. Accordingly, the original scope and fees were determined based on our experience with other City of Fresno pipeline projects, and an estimate of our expected involvement. The City subsequently switched to using a third-party construction manager, and our experiences during the construction of previous recycled water projects has shown that the level of effort required for construction support services under the third-party construction manager is considerably greater than under the City's Construction Management Division.

Amendment No. 2 included construction support services for this project as estimated for supporting the City's construction management efforts. Additional effort, above and beyond the effort included in Amendment No. 2, will be required. The scope listed in Part A.6 of Amendment No. 2 for the construction support services are removed from the project, and are replaced by the following:

1. Attend pre-construction conference
2. Review shop drawings and other contractor submittals
 - a) Assume 40 submittals at 4 hours each and 25 resubmittals at 2 hours each
3. Review and provide technical information to City for contractor change orders
 - a) Assume 40 hours total
4. Respond to requests for information (RFIs)

- a) Assume 15 RFIs at 8 hours each
- 5. Provide periodic worksite observation
 - a) Assume 4 site visits at 3 hours each
- 6. Prepare record drawings
 - a) Assume 15 sheets at two hours of CAD time per sheet and one hour of engineering time per drawing