### FIRST AMENDMENT TO AGREEMENT

THIS FIRST AMENDMENT TO AGREEMENT ("Amendment") made and entered into as of this day of \_\_\_\_\_\_, 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.

- 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	Blair, Church & Flynn Consulting Engineers, a California corporation
By: Thomas C. Esqueda, Director Department of Public Utilities	By: <u>KElliein</u> Name: KARLE KIENOW
ATTEST:	Title: VICE PRES
YVONNE SPENCE, CMC	(If corporation or LLC, Board Chair, Pres.
City Clerk	or Vice Pres.)
By: Marco Martinez-Velas Deputy Marco Martinez-Velas (2/30/16 APPROVED AS TO FORM:	By: ARM K. HOG
(2) 30   C	Name.
	Title:
DOUGLAS T. SLOAN	(If corporation or LLC, CFO, Treasurer,
City Attorney	Secretary or Assistant Secretary)
By: \$\frac{1}{2}\limits_6	, , , , , , , , , , , , , , , , , , , ,
Branden M. Collet Date	

Deputy City Attorney

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.
- 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 masterplanned 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 and 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 not expected to be required.
- Topographic surveys will be performed along the new route. Aerial photography will be obtained from online sources and also incorporated into the plans.
- 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 masterplanned 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.