

AMENDMENT NO. 3
Pyramid Peak WTP Improvements and Expansion Project
(City Project Nos. 151619 and 151620, Contract No. C-11349-3)

This Amendment No. 3 (“Amendment”) to the Professional Services Agreement (“Agreement”) is made this _____ day of _____, 2021, (“Effective Date”), by and between the City of Glendale, an Arizona municipal corporation (“City”) and Black & Veatch Corporation, a Delaware corporation authorized to do business in Arizona (“Contractor”).

RECITALS

- A. City and Black & Veatch Corporation (“Contractor”) previously entered into a Professional Services Agreement for Design & Construction Services - Pyramid Peak Water Treatment Plant Improvements & Expansion (WTP), Contract No. C-11349, dated November 22, 2016 (“Agreement”); and
- B. Based on studies developed during Phase I (C-8912), improvements were identified for the Pyramid Peak WTP to repair and replace equipment to ensure continued compliance with existing regulations, decrease frequency of corrective maintenance, and improve plant resiliency (Process Improvements). Additionally, the City of Peoria sought to expand the Pyramid Peak WTP to acquire an additional 15 million gallons per day (MGD) treatment capacity of its Central Arizona Project (CAP) allocation (Expansion Improvements). The 15 MGD expansion will result in an expanded total plant treatment capacity of 54 MGD. The City of Peoria's resulting ownership capacity will be 24 MGD or 44.4% and Glendale's ownership capacity will be 30 MGD, approximately 55.6%. These efforts are represented in Contract C-11349 dated 11/22/2016.
- C. Construction Administration Services for initial early improvements to the Pyramid Peak WTP treatment plant were completed (service and potable water pumps, chlorine feeders, chlorine dioxide generator etc.) and also included an allowance from the original contract (C-11349) for an assessment of the existing 67th Avenue transmission main (from the Pyramid Peak WTP reservoirs to Jomax Rd. These efforts are represented in Amendment 1 (Contract C11349-1, dated 04/10/2018) to the Professional Services Agreement.
- D. Construction Administration Services for remaining improvements to the Pyramid Peak WTP treatment plant for process improvements and expansion efforts are underway and are represented in Amendment 2 (Contract C11349-2, dated 06/25/2019) to the Professional Services Agreement
- E. Due to discovered previously existing water filter conditions (underdrains etc.) during the execution of remaining improvements (C11349-2), it is imperative the existing filters at the Pyramid Peak WTP be rehabilitated / repaired immediately to assure continued plant resiliency and operation. Additionally, the City desires to expand the initial assessment length of the transmission main to also include the length of main

from the City of Peoria turnout-structure at Jomax Road south to Arizona Route 101. The additional assessment length, from the Jomax turn-out structure will be solely borne by the City of Glendale's contribution of the Pyramid Peak WTP project costs.

- F.. City and Contractor wish to modify and amend the Agreement subject to and strictly in accordance with the terms of this Amendment.

AGREEMENT

In consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and Contractor hereby agree as follows:

1. **Recitals.** The recitals set forth above are not merely recitals but form an integral part of this Amendment.
2. **Term.** The term of the Agreement is extended for a one year period from February 22, 2022 through February 22, 2023, unless otherwise terminated or canceled as provided by the Agreement. All other provisions of the Agreement except as set forth in this Amendment shall remain in their entirety.
3. **Scope of Work.** The Amendment 3 scope is to provide administration and professional engineering services during the filter repairs / replacement and additional water transmission main assessment length from the Peoria turnout structure at Jomax Road south to Arizona Route 101.
4. **Compensation.** The Pyramid Peak WTP Improvements and Expansion Design resulted in a previous compensation of \$6,988,502 (Contract C-11349 dated 11/22/2016). Amendment 1 resulted in an additional increase in compensation of \$567,898 (Contract C-11349-1 dated 04/10/2018) to a total of \$7,556,400. Amendment 2 resulted in an additional increase in compensation of \$6,482,592 (Contract C-11349-2 dated 06/25/2019) to a total of \$14,038,992. Amendment 3 for the work described herein will result in an additional increase in compensation of \$669,540 to a total of \$14,708,532 for the work described herein as shown in Exhibit D (to be Contract C-11349-3).
5. **Insurance Certificate.** Current certificate will expire on November 1, 2021 and a new certificate applying to the extended term must be provided prior to this date to Materials Management and the Contract Administrator.
6. **Non-discrimination.** Contractor must not discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin, age, marital status, sexual orientation, gender identity or expression, genetic characteristics, familial status, U.S. military veteran status or any disability. Contractor will require any Sub-contractor to be bound to the same requirements as stated within this section. Contractor, and on behalf of any subcontractors, warrants compliance with this section.

7. **No Boycott of Israel.** To the extent A.R.S § 35-393 through § 35-393.03 are applicable, the parties hereby certify that they are not currently engaged in, and agree for the duration of the Agreement to not engage in, a boycott of goods or services from Israel, as that term is defined in A.R.S § 35-393.

8. **Attestation of PCI Compliance.** When applicable, the Contractor will provide the City annually with a Payment Card Industry Data Security Standard (PCI DSS) attestation of compliance certificate signed by an officer of Contractor with oversight responsibility.

9. **Ratification of Agreement.** City and Contractor hereby agree that except as expressly provided herein, the provisions of the Agreement shall be, and remain in full force and effect and that if any provision of this Amendment conflicts with the Agreement, then the provisions of this Amendment shall prevail.

[Signatures on the following page.]

CITY OF GLENDALE, an Arizona
municipal corporation

Kevin R. Phelps, City Manager

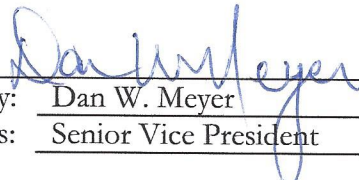
ATTEST:

Julie K. Bower, City Clerk (SEAL)

APPROVED AS TO FORM:

Michael D. Bailey, City Attorney

Black & Veatch Corporation
a Delaware corporation



By: Dan W. Meyer

Its: Senior Vice President

4/29/2021

EXHIBIT D
Professional Services Agreement – Amendment 3
COMPENSATION

METHOD AND AMOUNT OF COMPENSATION

Compensation shall be based on an hourly billing rate plus reimbursable expenses for Consultant and all Subconsultants. Documentation for reimbursable expenses must be included with each Payment Application.

NOT-TO-EXCEED AMOUNT

The total amount of this Amendment 3 paid to Consultant for completion of the work required by the Project must not exceed \$669,540.

DETAILED AMENDMENT COMPENSATION

TASK	FEE
Task 300 – Project Management	\$23,120
Task 9100 – PCCP Assessment (Glendale)	\$401,556
Task 9200 – Filter Underdrain Improvement (Glendale)	\$194,864
Subtotal	\$619,540
ALLOWANCES	\$50,000
TOTAL AMENDMENT	\$669,540

Exhibit B

Scope of Services for PCCP ASSESSMENT TOOL AND FILTER IMPROVEMENTS

SCOPE OF SERVICES

The following describes the scope of services and level of effort required. The scope is broken out into two distinct tasks (1) PCCP assessment including planning, assessment, evaluations, reporting, PCCP assessment tool and submittal review for JOC work, (2) Filters 1-14 underdrain replacement including engineering and engineering during construction.

TASK 300: PROJECT MANAGEMENT

Additional project management includes Consultant's time to develop, document, track, and coordinate this trend with the project partners and if accepted integrate the trend budget and scope in the Consultant's project controls for purposes of team coordination, performance schedule adjustment, tracking, invoicing and contract coordination for PCCP assessment tool through Pure / Xylem. The work extends the contract for an additional year to 2/22/2023

TASK 9100 PCCP ASSESSMENT TOOL – JOC SUBMITTAL REVIEWS

The contract construction administration and inspection amendment included Allowance 904 for assessment of the 60-inch pipeline from the Pyramid Peak WTP (PPWTP) to 67th Avenue and Jomax, approximately 6,200 feet. The total amount was for \$336,280. Of that amount, \$100,280 was for Consultant's services and \$236,000 was the firm providing the mobilization platform and specialized electro-magnetic equipment for the 60-in pipeline assessment. The City now intends to extend the inspection to include 4,730 feet of 54-inch PCCP, 8,323 feet of 48-inch PCCP, and up to 12,144 feet of 42-inch PCCP. This increases the total distance of pipeline inspected to 25,204 feet. It is anticipated this work will be completed in two inspection phases. The first phase includes the 60-inch and 54-inch PCCP over three 12 hour continuous days. The second phase conducted about 12 months later includes the 48-inch and 42-inch PCCP over five 12 hour days split between two separate weeks to allow for a different tool to be used for each diameter. The work includes:

- Pre-inspection planning and pre-inspection coordination with the equipment vendor, City's JOC contractor and City, including monthly meetings.
- Developing the inspection plans, the MOPOs, vendor coordination for development of plan, plan review coordination with the Cities and MCESD
- Conducting the in-field electromagnetic assessment of the PCCP pipeline
- Subcontracting w/ the assessment tool vendor for the tool and other services
- Analyzing the pipeline assessment data
- Providing structural analyses of pipe w/ wire breaks
- Presenting results and recommendations to the City
- Draft and Final Reports with summary of findings and recommendations
- Support for public outreach (public outreach will be under existing contract with MakPro).
- Providing submittal reviews for the manholes, manway taps, fire hydrant and associated permanent piping and valves for the work to be purchased and installed by the City's JOC contractor. The following submittals are anticipated:

- Interim manway tap
- Asphalt pavement
- Aggregate base course
- Concrete
- Reinforcement
- 96" Manhole frame and cover
- Valve box
- DIP & Fittings
- Valve Box and Debris CAP
- Permanent MW, bolts, flange kit and tap
- Polywrap
- Coatings
- CLSM

The costs of Consultant’s services for the PCCP assessment and related submittal are detailed in the attached.

DELIVERABLE

The deliverable includes:

- Presenting results and recommendations and Draft and Final reports, one report for the 60 and 54-inch transmission main and one report for the 48 and 42-inch transmission main, with summary of findings and recommendations
- Providing submittal responses.

EXPENSES AND VENDOR COSTS

Costs for printing two hard copies and delivery of a CDs of the draft and final reports are included. Additional expenses are for the transmission main assessment equipment and are documented in the Pure Technologies proposal attached.

ALLOWANCE

An allowance of \$50,000 is included in the event unplanned or changed conditions cause delays in the transmission main assessment. It is for Pure’s labor and expenses while on standby. It will be billed based actual expenses and labor costs.

TASK 9200 FILTER IMPROVEMENTS

The Filter underdrains in Filters 5-14 will be replaced with new Leopold Type S underdrain block and XA one-piece media retention cap. Since the same underdrain and filter media retention caps were installed in Train 4 it is assumed no additional drawings, specifications or submittal reviews are required Filters 5-14. Consultant will provide coordination and half time resident observations during construction for Filters 5-14 and media installation, and backwashing of media. The deliverable includes daily reports and photo documentation. It is anticipated conformed to construction drawings will not be required for Filters 5-14.

The Consultant will investigate an option for replacing Train 1 (Filters 1-4) nozzles with replacement nozzles and leaving the concrete plenum in place. The investigation includes coordinating with the replacement nozzle supplier, contractor and City. Consultant has included 68 hours for engineering analyses for implementation and presentation to the City regarding the option. It is anticipated if this

option is selected the Consultant will also provide specifications for the new nozzles and minimal additional engineered details. New gravel media will be required and Consultant will provide the specification for the gravel media.

Consultant will review nozzle product submittals prior to Contractor installation. Consultant will observe nozzle installation, backwash water pattern testing and installation of replacement media. It is assumed the replacement sand and anthracite will be the same as what was installed in Train 4 and no submittals reviews are required for this media. Consultant will observe the media installation, and backwashing of media with the new nozzles.

There is also an option to replace the nozzle type underdrains in filters 1-4. This will require demolition of the cast-in-place concrete plenum which the nozzles are embedded in and also adding a stainless steel air pipe distribution header connection and supports. Consultant will work with the Contractor and filter vendor to provide design for any minor concrete repair due to plenum demolitions and design of stainless steel pipe support for integrating the new air distribution header within the filters. The Vendor will design the header and air distribution piping and connections to the plastic filter underdrains with media retention caps in Filters 1-4.

For resident services it is estimated the first three filters will take 2 months, the remaining filters will be done in 3 phases, beginning October 18 and will required one resident averaging 20 hours per week. Total construction time is six months.

EXPENSES

Costs for printing of up to three half-size drawing sets for construction services and one half size of the final conformed to construction drawings. Consultant has also included costs for delivering CD of the drawings and specifications to the City's PM as well as miscellaneous courier services.

DELIVERABLES

This task deliverable includes:

- Presentation regarding replacement nozzle option for filters 1-4
- The following updated specification
 - 13220 Filter Underdrain and Media
- The following Drawings.
 - Cover
 - General Notes
 - Filters 1-4 Plan – Mechanical Process
 - Filter Sections and Details – Mechanical Process
 - Process Mechanical Details
 - Filters 1-4 Plan – Structural
 - Filter Sections and Details – Structural
 - Structural General Notes
 - Typical Concrete and Surface Repair Details and Notes
- Submittal reviews for:

- Filter nozzles
 - Filter gravel media
 - Air piping arrangement
 - Air piping fittings and pipe supports
 - Filter test plan
 - Filter test results from underdrain and media vendor
 - Disinfection plan and results
 - Structural repair products
 - Rebar details (if required)
- Construction Daily Reports, Substantial Completion Punch List, Final Completion notice
 - Conformed to construction drawings and photo documentation

ASSUMPTIONS AND CLARIFICATIONS

The scope and level of effort estimate is based on the following assumptions and clarifications.

1. The City, through other service agreements, will have a working Hillcrest Ranch Booster Station (HRBS) and a standard operating procedure for use of HRBS including any emergency procedures water quality testing and flushing.
2. City through JOC contractor will provide traffic control, and other construction support during inspections, such as dewatering, dewatering management (hoses, de-chlorination, pump if required, etc.), discharge permitting, access to the MW, lifting and re-installing manways w/new gaskets / bolts, traffic control etc.
3. The allowance does not include any water quality testing, flushing plans or other provisions for flushing.
4. For the installation of the Fire Hydrants and the MHs for the PCCP line in 67th Avenue the City will be performing the majority of inspection services, review of contractor costs, Contractor pay applications, use of allowance reviews, substantial and final completion documentation.
5. For the filter improvements it is assumed the specifications for GMP1B and 2 will be used except should the City decide to just replace the nozzles then specifications for the replacement nozzles will be provided.
6. Since the filter underdrain replacement is an O&M type projects it is assumed there is no permit submittal required the City of Phoenix, Maricopa County Environmental Services Department or City of Glendale.
7. Bidding services including review of contractors bid is not included.
8. Disinfection of the filters and BACT testing shall be by others.
9. City or others such as a job order contractor will provide filter media removal, access to filters, filter draining, and confined space entry permit for inspection.
10. Consultant shall not have authority or responsibility to supervise, direct, or control the Contractor's work or the Contractor's means, methods, techniques, sequences, or procedures of construction. Consultant shall not have authority or responsibility for safety precautions and programs incident to the Contractor's work or for any failure of the Contractor to comply with laws, regulations, rules, ordinances, codes, or orders applicable to the Contractor furnishing and performing the work.

EXHIBIT D
Professional Services Agreement – Amendment 3
COMPENSATION

METHOD AND AMOUNT OF COMPENSATION

Compensation shall be based on an hourly billing rate plus reimbursable expenses for Consultant and all Subconsultants. Documentation for reimbursable expenses must be included with each Payment Application.

NOT-TO-EXCEED AMOUNT

The total amount of this Amendment 3 paid to Consultant for completion of the work required by the Project must not exceed \$669,540.

DETAILED AMENDMENT COMPENSATION

TASK	FEE
Task 300 – Project Management	\$23,120
Task 9100 – PCCP Assessment (Glendale)	\$401,556
Task 9200 – Filter Underdrain Improvement (Glendale)	\$194,864
Subtotal	\$619,540
ALLOWANCES	\$50,000
TOTAL AMENDMENT	\$669,540