

~~CITY CLERK~~
ORIGINAL

C-8693
11/07/2013

PROFESSIONAL SERVICES AGREEMENT
City of Glendale Water Services Department
Oasis Water Campus Underdrain Corrosion Study

This Professional Services Agreement ("Agreement") is entered into and effective between CITY OF GLENDALE, an Arizona municipal corporation ("City") and Black & Veatch Corporation., a Delaware Corporation, authorized to do business in Arizona, ("Consultant") as of the 7th day of November, 2013 ("Effective Date").

RECITALS

- A. City intends to undertake a project for the benefit of the public and with public funds that is more fully set forth in **Exhibit A**, Project (the "Project");
- B. City desires to retain the professional services of Consultant to perform certain specific duties and produce the specific work as set forth in the attached **Exhibit B**, Project Scope of Work ("Scope");
- C. Consultant desires to provide City with professional services ("Services") consistent with best consulting or architectural practices and the standards set forth in this Agreement, in order to complete the Project; and
- D. City and Consultant desire to memorialize their agreement with this document.

AGREEMENT

The parties hereby agree as follows:

1. Key Personnel; Other Consultants and Subcontractors.

- 1.1 Professional Services. Consultant will provide all Services necessary to assure the Project is completed timely and efficiently consistent within Project requirements, including, but not limited to, working in close interaction and interfacing with City and its designated employees, and working closely with others, including other consultants or contractors, retained by City.
- 1.2 Project Team.
 - a. Project Manager.
 - (1) Consultant will designate an employee as Project Manager with sufficient training, knowledge, and experience to, in the City's opinion, complete the project and handle all aspects of the Project such that the work produced by Consultant is consistent with applicable standards as detailed in this Agreement; and
 - (2) The City must approve the designated Project Manager.
 - b. Project Team.
 - (1) The Project Manager and all other employees assigned to the Project by Consultant will comprise the "Project Team."
 - (2) Project Manager will have responsibility for and will supervise all other employees assigned to the Project by Consultant.
 - c. Discharge, Reassign, Replacement.
 - (1) Consultant acknowledges the Project Team is comprised of the same persons and roles for each as may have been identified in **Exhibit A**.
 - (2) Consultant will not discharge, reassign, replace or diminish the responsibilities of any of the employees assigned to the Project who have been approved by City without City's prior written consent unless that person leaves the employment of Consultant, in which event the substitute must first be approved in writing by City.

(3) Consultant will change any of the members of the Project Team at the City's request if an employee's performance does not equal or exceed the level of competence that the City may reasonably expect of a person performing those duties, or if the acts or omissions of that person are detrimental to the development of the Project.

d. Subcontractors.

- (1) Consultant may engage specific technical contractors (each a "Subcontractor") to furnish certain service functions.
- (2) Consultant will remain fully responsible for Subcontractor's services.
- (3) Subcontractors must be approved by the City.
- (4) Consultant will certify by letter that all contracts with Subcontractors have been executed incorporating requirements and standards as set forth in this Agreement.

2. **Schedule.** The Services will be undertaken in a manner that ensures the Project is completed timely and efficiently in accordance with the Project.

3. **Consultant's Work.**

3.1 Standard Consultant must perform Services in accordance with the standards of due diligence, care, and quality prevailing among consultants having substantial experience with the successful furnishing of Services for projects that are equivalent in size, scope, quality, and other criteria under the Project and identified in this Agreement.

3.2 Licensing. Consultant warrants that:

- a. Consultant and its Subconsultants or Subcontractors will hold all appropriate and required licenses, registrations and other approvals necessary for the lawful furnishing of Services ("Approvals"); and
- b. Neither Consultant nor any Subconsultant or Subcontractor has been debarred or otherwise legally excluded from contracting with any federal, state, or local governmental entity ("Debarment").
 - (1) City is under no obligation to ascertain or confirm the existence or issuance of any Approvals or Debarments, or to examine Consultant's contracting ability.
 - (2) Consultant must notify City immediately if any Approvals or Debarment changes during the Agreement's duration. The failure of the Consultant to notify City as required will constitute a material default under the Agreement.

3.3 Compliance. Services will be furnished in compliance with applicable federal, state, county and local statutes, rules, regulations, ordinances, building codes, life safety codes, and other standards and criteria designated by City.

3.4 Coordination; Interaction.

- a. For projects that the City believes requires the coordination of various professional services, Consultant will work in close consultation with City to proactively interact with any other professionals retained by City on the Project ("Coordinating Project Professionals").
- b. Consultant will meet to review the Project, Schedule and in-progress work with Coordinating Project Professionals and City as often and for durations as City reasonably considers necessary in order to ensure the timely work delivery and Project completion.
- c. For projects not involving Coordinating Project Professionals, Consultant will proactively interact with any other contractors when directed by City to obtain or disseminate timely information for the proper execution of the Project.

3.5 Work Product.

- a. Ownership. Upon receipt of payment for Services furnished, Consultant grants to City, and will cause its Subconsultants or Subcontractors to grant to the City, the exclusive ownership of and all copyrights, if any, to evaluations, reports, drawings, specifications, project manuals, surveys, estimates, reviews, minutes, all "architectural work" as defined in the United States Copyright Act, 17 U.S.C § 101, *et seq.*, and other intellectual work product as may be applicable ("Work Product").
 - (1) This grant is effective whether the Work Product is on paper (e.g., a "hard copy"), in electronic format, or in some other form.
 - (2) Consultant warrants, and agrees to indemnify, hold harmless and defend City for, from and against any claim that any Work Product infringes on third-party proprietary interests.
- b. Delivery. Consultant will deliver to City copies of the preliminary and completed Work Product promptly as they are prepared.
- c. City Use.
 - (1) City may reuse the Work Product at its sole discretion.
 - (2) In the event the Work Product is used for another project without further consultations with Consultant, the City agrees to indemnify and hold Consultant harmless from any claim arising out of the Work Product.
 - (3) In such case, City will also remove any seal and title block from the Work Product.

4. **Compensation for the Project.**

- 4.1 Compensation. Consultant's compensation for the Project, including those furnished by its Subconsultants or Subcontractors will not exceed \$48,580 as specifically detailed in **Exhibit D** ("Compensation").
- 4.2 Change in Scope of Project. The Compensation may be equitably adjusted if the originally contemplated Scope as outlined in the Project is significantly modified.
 - a. Adjustments to Compensation require a written amendment to this Agreement and may require City Council approval.
 - b. Additional services which are outside the Scope of the Project contained in this Agreement may not be performed by the Consultant without prior written authorization from the City.
 - c. Notwithstanding the incorporation of the Exhibits to this Agreement by reference, should any conflict arise between the provisions of this Agreement and the provisions found in the Exhibits and accompanying attachments, the provisions of this Agreement shall take priority and govern the conduct of the parties.
- 4.3 Allowances. An "Allowance" may be identified in **Exhibit D** only for work that is required by the Scope and the value of which cannot reasonably be quantified at the time of this Agreement.
 - a. As stated in Sec. 4.1 above, the Compensation must incorporate all Allowance amounts identified in **Exhibit D** and any unused allowance at the completion of the Project will remain with City.
 - b. Consultant may not add any mark-up for work identified as an Allowance and which is to be performed by a Subconsultant.
 - c. Consultant will not use any portion of an Allowance without prior written authorization from the City.

- d. Examples of Allowance items include, but are not limited to, subsurface pothole investigations, survey, geotechnical investigations, public participation, radio path studies and material testing.

4.4 Expenses. City will reimburse Consultant for certain out-of-pocket expenses necessarily incurred by Consultant in connection with this Agreement, without mark-up (the "Reimbursable Expenses"), including, but not limited to, document reproduction, materials for book preparation, postage, courier and overnight delivery costs incurred with Federal Express or similar carriers, travel and car mileage, subject to the following:

- a. Mileage, airfare, lodging and other travel expenses will be reimbursable only to the extent these would, if incurred, be reimbursed to City of Glendale personnel under its policies and procedures for business travel expense reimbursement made available to Consultant for review prior to the Agreement's execution, and which policies and procedures will be furnished to Consultant;
- b. The Reimbursable Expenses in this section are approved in advance by City in writing; and
- c. The total of all Reimbursable Expenses paid to Consultant in connection with this Agreement will not exceed the "not to exceed" amount identified for Reimbursable Services in the Compensation.

5. **Billings and Payment.**

5.1 Applications.

- a. Consultant will submit monthly invoices (each, a "Payment Application") to City's Project Manager and City will remit payments based upon the Payment Application as stated below.
- b. The period covered by each Payment Application will be one calendar month ending on the last day of the month.

5.2 Payment.

- a. After a full and complete Payment Application is received, City will process and remit payment within 30 days.
- b. Payment may be subject to or conditioned upon City's receipt of:
 - (1) Completed work generated by Consultant and its Subconsultants and Subcontractors; and
 - (2) Unconditional waivers and releases on final payment from all Subconsultants and Subcontractors as City may reasonably request to assure the Project will be free of claims arising from required performances under this Agreement.

5.3 Review and Withholding. City's Project Manager will timely review and certify Payment Applications.

- a. If the Payment Application is rejected, the Project Manager will issue a written listing of the items not approved for payment.
- b. City may withhold an amount sufficient to pay expenses that City reasonably expects to incur in correcting the deficiency or deficiencies rejected for payment.

6. **Termination.**

6.1 For Convenience. City may terminate this Agreement for convenience, without cause, by delivering a written termination notice stating the effective termination date, which may not be less than 15 days following the date of delivery.

- a. Consultant will be equitably compensated for Services furnished prior to receipt of the termination notice and for reasonable costs incurred.

- b. Consultant will also be similarly compensated for any approved effort expended, and approved costs incurred, that are directly associated with Project closeout and delivery of the required items to the City.

6.2 For Cause. City may terminate this Agreement for cause if Consultant fails to cure any breach of this Agreement within seven days after receipt of written notice specifying the breach.

- a. Consultant will not be entitled to further payment until after City has determined its damages. If City's damages resulting from the breach, as determined by City, are less than the equitable amount due but not paid Consultant for Services furnished, City will pay the amount due to Consultant, less City's damages, in accordance with the provision of Sec. 5.
- b. If City's direct damages exceed amounts otherwise due to Consultant, Consultant must pay the difference to City immediately upon demand; however, Consultant will not be subject to consequential damages more than \$1,000,000 or the amount of this Agreement, whichever is greater.

7. **Conflict.** Consultant acknowledges this Agreement is subject to A.R.S. § 38-511, which allows for cancellation of this Agreement in the event any person who is significantly involved in initiating, negotiating, securing, drafting, or creating the Agreement on City's behalf is also an employee, agent, or consultant of any other party to this Agreement.

8. **Insurance.**

8.1 Requirements. Consultant must obtain and maintain the following insurance ("Required Insurance"):

- a. Consultant and Subconsultants and Subcontractors. Consultant, and each Subconsultant or Subcontractor performing work or providing materials related to this Agreement must procure and maintain the insurance coverages described below (collectively referred to herein as the "Consultant's Policies"), until each Party's obligations under this Agreement are completed.
- b. General Liability.
 - (1) Consultant must at all times relevant hereto carry a commercial general liability policy with a combined single limit of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate limit.
 - (2) Subconsultants and Subcontractors must at all times relevant hereto carry a general commercial liability policy with a combined single limit of at least \$1,000,000 per occurrence.
 - (3) This commercial general liability insurance must include independent contractors' liability, contractual liability, broad form property coverage, XCU hazards if requested by the City, and a separation of insurance provision.
 - (4) These limits may be met through a combination of primary and excess liability coverage.
- c. Professional Liability. Consultant must maintain a professional errors and omissions liability policy providing a minimum limit of \$1,000,000 for each claim and a \$1,000,000 annual aggregate limit.
- d. Auto. A business auto policy providing a liability limit of at least \$1,000,000 per accident for Consultant and \$1,000,000 per accident for Subconsultants and Subcontractors and covering owned, non-owned and hired automobiles.
- e. Workers' Compensation and Employer's Liability. Consultant must also maintain a workers' compensation and employer's liability policy providing at least the minimum benefits required by Arizona law.

- f. Notice of Changes. Consultant's Policies must provide for not less than 30 days' advance written notice to City Representative of.
 - (1) Cancellation or termination of Consultant's Policies;
 - (2) Reduction of the coverage limits of any of Consultant's Policies; and
 - (3) Any other material modification of Consultant's Policies related to this Agreement.
- g. Certificates of Insurance.
 - (1) Within 10 business days after the execution of the Agreement, Consultant must deliver to City Representative certificates of insurance for each of Consultant's Policies, which will confirm the existence or issuance of Consultant's Policies in accordance with the provisions of this section, and copies of the endorsements of Consultant's Policies in accordance with the provisions of this section.
 - (2) City is and will be under no obligation either to ascertain or confirm the existence or issuance of Consultant's Policies, or to examine Consultant's Policies, or to inform Consultant, Subconsultant, or Subcontractor in the event that any coverage does not comply with the requirements of this section.
 - (3) Consultant's failure to secure and maintain Consultant's Policies and to assure Consultant's Policies as required will constitute a material default under the Agreement.
- h. Other Contractors or Vendors.
 - (1) Other contractors or vendors that may be contracted with in connection with the Project must procure and maintain insurance coverage as is appropriate to their particular contract.
 - (2) This insurance coverage must comply with the requirements set forth above for Consultant's Policies (e.g., the requirements pertaining to endorsements to name the parties as additional insured parties and certificates of insurance).
- i. Policies. Except with respect to workers' compensation and Consultant's professional liability coverages, City must be named and properly endorsed as additional insureds on all liability policies required by this section.
 - (1) The coverage extended to additional insureds must be primary and must not contribute with any insurance or self insurance policies or programs maintained by the additional insureds.
 - (2) All insurance policies obtained pursuant to this section must be with companies legally authorized to do business in the State of Arizona and reasonably acceptable to all parties.

8.2 Subconsultants and Subcontractors.

- a. Consultant must also cause its Subconsultants and Subcontractors to obtain and maintain the Required Insurance.
- b. City may consider waiving these insurance requirements for a specific Subconsultant or Subcontractor if City is satisfied the amounts required are not commercially available to the Subconsultant or Subcontractor and the insurance the Subconsultant or Subcontractor does have is appropriate for the Subconsultant or Subcontractor's work under this Agreement.
- c. Consultant and Subcontractors must provide to the City proof of the Required Insurance whenever requested.

8.3 Indemnification.

- a. To the fullest extent permitted by law, Consultant must defend, indemnify, and hold harmless City and its elected officials, officers, employees and agents (each, an "Indemnified Party," collectively, the "Indemnified Parties") for, from, and against any and all claims, demands, actions, damages, judgments, settlements, personal injury (including sickness, disease, death, and bodily harm), property damage (including loss of use), infringement, governmental action and all other losses and expenses, including attorneys' fees and litigation expenses (each, a "Demand or Expense" collectively "Demands or Expenses") asserted by a third-party (i.e. a person or entity other than City or Consultant) and that arises out of or results from the breach of this Agreement by the Consultant or the Consultant's negligent actions, errors or omissions (including any Subconsultant or Subcontractor or other person or firm employed by Consultant), whether sustained before or after completion of the Project.
- b. This indemnity and hold harmless provision applies even if a Demand or Expense is in part due to the Indemnified Party's negligence or breach of a responsibility under this Agreement, but in that event, Consultant will be liable only to the extent the Demand or Expense results from the negligence or breach of a responsibility of Consultant or of any person or entity for whom Consultant is responsible.
- c. Consultant is not required to indemnify any Indemnified Parties for, from, or against any Demand or Expense resulting from the Indemnified Party's sole negligence or other fault solely attributable to the Indemnified Party.

9. Immigration Law Compliance.

- 9.1 Consultant, and on behalf of any Subconsultant or Subcontractor, warrants, to the extent applicable under A.R.S. § 41-4401, compliance with all federal immigration laws and regulations that relate to their employees as well as compliance with A.R.S. § 23-214(A) which requires registration and participation with the E-Verify Program.
- 9.2 Any breach of warranty under this section is considered a material breach of this Agreement and is subject to penalties up to and including termination of this Agreement.
- 9.3 City retains the legal right to inspect the papers of any Consultant, Subconsultant, or Subcontractor employee who performs work under this Agreement to ensure that the Consultant, Subconsultant or any Subcontractor is compliant with the warranty under this section.
- 9.4 City may conduct random inspections, and upon request of City, Consultant will provide copies of papers and records of Consultant demonstrating continued compliance with the warranty under this section. Consultant agrees to keep papers and records available for inspection by the City during normal business hours and will cooperate with City in exercise of its statutory duties and not deny access to its business premises or applicable papers or records for the purposes of enforcement of this section.
- 9.5 Consultant agrees to incorporate into any subcontracts under this Agreement the same obligations imposed upon Consultant and expressly accrue those obligations directly to the benefit of the City. Consultant also agrees to require any Subconsultant or Subcontractor to incorporate into each of its own subcontracts under this Agreement the same obligations above and expressly accrue those obligations to the benefit of the City.
- 9.6 Consultant's warranty and obligations under this section to the City is continuing throughout the term of this Agreement or until such time as the City determines, in its sole discretion, that Arizona law has been modified in that compliance with this section is no longer a requirement.
- 9.7 The "E-Verify Program" above means the employment verification program administered by the United States Department of Homeland Security, the Social Security Administration, or any successor program.

10. **Prohibitions.** Consultant certifies under A.R.S. §§ 35-391 *et seq.* and 35-393 *et seq.*, that it does not have, and during the term of this Agreement will not have, "scrutinized" business operations, as defined in the preceding statutory sections, in the countries of Sudan or Iran.

11. **Notices.**

11.1 A notice, request or other communication that is required or permitted under this Agreement (each a "Notice") will be effective only if:

- a. The Notice is in writing; and
- b. Delivered in person or by overnight courier service (delivery charges prepaid), certified or registered mail (return receipt requested).
- c. Notice will be deemed to have been delivered to the person to whom it is addressed as of the date of receipt, if:
 - (1) Received on a business day before 5:00 p.m. at the address for Notices identified for the Party in this Agreement by U.S. Mail, hand delivery, or overnight courier service; or
 - (2) As of the next business day after receipt, if received after 5:00 p.m.
- d. The burden of proof of the place and time of delivery is upon the Party giving the Notice.
- e. Digitalized signatures and copies of signatures will have the same effect as original signatures.

11.2 Representatives.

- a. Consultant. Consultant's representative (the "Consultant's Representative") authorized to act on Consultant's behalf with respect to the Project, and his or her address for Notice delivery is:

Dan Meyer, P.E.
Sr. Vice President
3133 E Camelback Road, Suite 210
Phoenix, Arizona 85016

- b. City. City's representative ("City's Representative") authorized to act on City's behalf, and his or her address for Notice delivery is:

City of Glendale
c/o
Craig Johnson, P.E.
Executive Director Water Services
7070 W Northern Avenue
Glendale, Arizona 85301

With required copy to:

City Manager
City of Glendale
5850 West Glendale Avenue
Glendale, Arizona 85301

City Attorney
City of Glendale
5850 West Glendale Avenue
Glendale, Arizona 85301

- c. Concurrent Notices.
 - (1) All notices to City's representative must be given concurrently to City Manager and City Attorney.
 - (2) A notice will not be deemed to have been received by City's representative until the time that it has also been received by the City Manager and the City Attorney.

- (3) City may appoint one or more designees for the purpose of receiving notice by delivery of a written notice to Consultant identifying the designee(s) and their respective addresses for notices.
 - d. Changes. Consultant or City may change its representative or information on Notice, by giving Notice of the change in accordance with this section at least ten days prior to the change.
- 12. **Financing Assignment.** City may assign this Agreement to any City-affiliated entity, including a non-profit corporation or other entity whose primary purpose is to own or manage the Project.
- 13. **Entire Agreement; Survival; Counterparts; Signatures.**
 - 13.1 **Integration.** This Agreement contains, except as stated below, the entire agreement between City and Consultant and supersedes all prior conversations and negotiations between the parties regarding the Project or this Agreement.
 - a. Neither Party has made any representations, warranties or agreements as to any matters concerning the Agreement's subject matter.
 - b. Representations, statements, conditions, or warranties not contained in this Agreement will not be binding on the parties.
 - c. Inconsistencies between the solicitation, any addenda attached to the solicitation, the response or any excerpts attached as **Exhibit A**, and this Agreement, will be resolved by the terms and conditions stated in this Agreement.
 - 13.2 **Interpretation.**
 - a. The parties fairly negotiated the Agreement's provisions to the extent they believed necessary and with the legal representation they deemed appropriate.
 - b. The parties are of equal bargaining position and this Agreement must be construed equally between the parties without consideration of which of the parties may have drafted this Agreement.
 - c. The Agreement will be interpreted in accordance with the laws of the State of Arizona.
 - 13.3 **Survival.** Except as specifically provided otherwise in this Agreement, each warranty, representation, indemnification and hold harmless provision, insurance requirement, and every other right, remedy and responsibility of a Party, will survive completion of the Project, or the earlier termination of this Agreement.
 - 13.4 **Amendment.** No amendment to this Agreement will be binding unless in writing and executed by the parties. Electronic signature blocks do not constitute execution for purposes of this Agreement. Any amendment may be subject to City Council approval.
 - 13.5 **Remedies.** All rights and remedies provided in this Agreement are cumulative and the exercise of any one or more right or remedy will not affect any other rights or remedies under this Agreement or applicable law.
 - 13.6 **Severability.** If any provision of this Agreement is voided or found unenforceable, that determination will not affect the validity of the other provisions, and the voided or unenforceable provision will be reformed to conform with applicable law.
 - 13.7 **Counterparts.** This Agreement may be executed in counterparts, and all counterparts will together comprise one instrument.
- 14. **Term.** The term of this Agreement commences upon the Effective Date and continues for a 1 year initial period. The City may, at its option and with the approval of the Consultant, extend the term of this Agreement an additional 0 years, renewable on an annual basis. Consultant will be notified in writing by the City of its intent to extend the Agreement period at least 30 calendar days prior to the expiration of the

original or any renewal Agreement period. Price adjustments will only be reviewed during the Agreement renewal period. There are no automatic renewals of this Agreement.

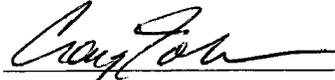
15. **Dispute Resolution.** Each claim, controversy and dispute (each a "Dispute") between Consultant and City will be resolved in accordance with **Exhibit E**. The final determination will be made by the City.
16. **Exhibits.** The following exhibits, with reference to the term in which they are first referenced, are incorporated by this reference.

Exhibit A	Project
Exhibit B	Scope of Work
Exhibit C	Schedule
Exhibit D	Compensation
Exhibit E	Dispute Resolution

(Signatures appear on the following page.)

The parties enter into this Agreement effective as of the date shown above.

City of Glendale,
an Arizona municipal corporation



By: Craig Johnson, P.E.
Its: Executive Director Water Services

ATTEST:



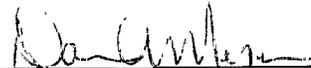
Pam Hanna, City Clerk (SEAL)

APPROVED AS TO FORM:



Michael D. Bailey, City Attorney

Black & Veatch Corporation,
a Delaware corporation



By: Dan Meyer, P.E.
Its: Sr. Vice President

EXHIBIT A
Professional Services Agreement

PROJECT

(Cover Page)

EXHIBIT A-SCOPE OF WORK

PSA Oasis Water Campus Underdrain Corrosion Study

For Exhibit A: Project description, please see following attached Exhibits A & B

EXHIBIT B
Professional Services Agreement

SCOPE OF WORK

(Cover Page)

OASIS WTP CORROSION ASSESSMENT SCOPE

BACKGROUND

The City of Glendale Oasis Water Campus' Surface Water Treatment Plant (SWTP) has experienced corrosion of the filter underdrains. Therefore, a corrosion assessment focusing on the filters is desired with recommendations for addressing the corrosion.

OBJECTIVE

The objective of the Corrosion Assessment project is to assess the condition of the existing basins and equipment, evaluate potential causes of corrosion, and provide recommendations for addressing the corrosion through repairs, operational changes, or other means.

SCOPE

The Corrosion Assessment project will be comprised of the following tasks.

Task 101: Oasis WTP water quality – Testing & Analysis

Oasis SWTP water quality testing was performed in late 2012 and will be used to supplement the evaluation as well as historical data provided by the City. Additional water quality testing as agreed upon by the City will be performed to analyze water quality from multiple locations within the Oasis SWTP and the groundwater treatment plant (GTP). B&V and the City will confirm at the project kick-off meeting which of the below parameters will be analyzed and performed by the City's certified laboratory or a local certified laboratory to be paid by the City. The City will coordinate sampling for each identified sample location:

- Water temperature (on-line instrumentation)
- pH
- Alkalinity
- Hardness
- Sulfates
- Chloride
- Free chlorine
- Microbiological growth
 - Sulfate reducing bacteria (SRB)
 - Iron reducing bacteria (IRB)
 - Acid producing bacteria (APB)

While the focus of this evaluation is on the filters, testing will be done at the following SWTP and GTP locations and will be sampled by the City to obtain a water chemistry profile through the Oasis Water Campus (both surface and groundwater treatment facilities).

- SWTP
 - Raw water
 - Sedimentation basin inlet
 - Filter influent (common)
 - Filter effluent (common)
 - Finished water (blended with GTP if operational)
 - Residuals treatment (lagoons)

- Filter backwash sampled at the trough in the basin being backwashed at varying filter run lengths (up to five run lengths – i.e. 40 hours, 60, 80, 100, 120)
- GTP
 - Common Influent
 - Effluent – prior to blending
 - Effluent – after blending
 - Regeneration cycle – concentrated step
 - Regeneration cycle – rinse step
 - Residuals treatment (SWTP lagoons)

Test results from the sampling will be analyzed by the Engineer upon receipt to determine the potential impacts to the SWTP equipment.

Task 102: On-site Condition Survey

A visual condition survey of the SWTP filters will be timed during media changeout of a filter to gather information to determine if there are corrosion issues not previously documented by identifying:

- Locations of incipient corrosion
- Critical areas of concern
- Areas that require further evaluation
- Possible changes to preventative maintenance practices and long term asset management

The on-site condition survey will consist of the following components:

- Meeting with City Water Services staff to discuss the background corrosion, operational, and maintenance information provided by the plant staff.
- Conducting visual observations and macro photography at select locations on available structures and affected surfaces with conditions documented using digital photography.
- Review of macro photography of SWTP filter structures during previous underdrain repair.
- Visual evaluation of substrate condition, including:
 - concrete structures
 - equipment, including filter underdrains prior to media installation

Task 103: Metallurgical Testing & Corrosion Monitoring

A few of the original stainless steel underdrain lateral end caps were shipped back separately with the refurbished underdrains. The following metallurgical laboratory testing will be coordinated by B&V and paid for by the City:

- Stainless steel underdrain equipment or piping (with and without corrosion damage)
 - Analysis and testing (chemical analysis, hardness, tensile testing)
 - Metallographic assessment (only to be performed on underdrains or piping that was not disturbed / media blasted)
 - Optical metallography and/or scanning electron microscopy (SEM)

Analysis of the laboratory testing results will be reviewed and incorporated into the filter underdrain assessment and the draft and final report.

Corrosion monitoring is recommended to determine corrosion rate of filter underdrains. B&V will provide the City with a recommended make / model for real time corrosion rate probe / monitoring equipment as well as recommended probe location(s). City will procure, install, start-up, and monitor

data from installed equipment. B&V to review any data gathered prior to completion of the project and include in draft and final report.

Task 104: Review of plant operations & information

B&V will review the following Oasis Water Campus standard operating procedures (SOPs) provided by the City including:

- “Normal” seasonal chemical dosages and locations (SWTP)
- Filter run times (SWTP)
- Backwash duration (SWTP)
- Frequency of filter maintenance (chemical treatment) (SWTP)
- SWTP / GTP blending
- Recycle of backwash / IX regeneration (SWTP / GTP)

Task 105: Filter Underdrain Assessment Report

Based on tasks 101-104, draft and final reports focusing on the SWTP filter underdrains will be delivered to summarize the findings and provide recommendations to prevent corrosion / suggest improvements for the filters and filter underdrains (including alternative equipment and modifications required). The draft and final reports will include interpretation of water quality results and potential impacts to corrosion of the existing filter structure / underdrains. The draft report will include recommendations for capital improvements (such as material of construction changes, further or alternate chemical treatment, etc.) as well as recommendations for changes to standard operating procedures. Three hard copies and one electronic pdf copy will be provided.

After review and incorporating City’s review comments, three hard copies and one electronic pdf copy of the final report will be prepared and delivered to the City.

Task 201: Project Management

B&V will perform QA / QC review of deliverables and prepare monthly progress reports and invoices. B&V will assist in the overall project team coordination to achieve successful project completion.

DELIVERABLES

The study deliverables will be the draft and final reports (Task 105).

SCHEDULE

Schedule is presented in Exhibit B.

BUDGET

Budget is presented in Exhibit A.

EXHIBIT C
Professional Services Agreement

SCHEDULE

(Cover Page)

ATTACHMENT 

City of Glendale
Oasis WTP Corrosion Assessment
Schedule

Task	1	2	3	4	5	6	7	8	9	10	11	12
101 - Water Quality Testing & Analysis												
102 - On-site Condition Survey												
103 - Metallurgical Testing & Corrosion Monitoring												
105 - Plant O&M & Information Review												
105 - Filter Underdrain Assessment Report												
201 - Project Management												

EXHIBIT D
Professional Services Agreement

COMPENSATION

METHOD AND AMOUNT OF COMPENSATION

Time and Materials based on the billable rates listed in the Attachment D - Fee Estimate.

NOT-TO-EXCEED AMOUNT

The total amount of compensation paid to Consultant for full completion of all work required by the Project during the entire term of the Project must not exceed \$48,580.

DETAILED PROJECT COMPENSATION

Provided in Attachment D - Fee Estimate.

EXHIBIT E
Professional Services Agreement

DISPUTE RESOLUTION

1. Disputes.

- 1.1 Commitment. The parties commit to resolving all disputes promptly, equitably, and in a good-faith, cost-effective manner.
- 1.2 Application. The provisions of this Exhibit will be used by the parties to resolve all controversies, claims, or disputes ("Dispute") arising out of or related to this Agreement-including Disputes regarding any alleged breaches of this Agreement.
- 1.3 Initiation. A party may initiate a Dispute by delivery of written notice of the Dispute, including the specifics of the Dispute, to the Representative of the other party as required in this Agreement.
- 1.4 Informal Resolution. When a Dispute notice is given, the parties will designate a member of their senior management who will be authorized to expeditiously resolve the Dispute.
- a. The parties will provide each other with reasonable access during normal business hours to any and all non-privileged records, information and data pertaining to any Dispute in order to assist in resolving the Dispute as expeditiously and cost effectively as possible;
 - b. The parties' senior managers will meet within 10 business days to discuss and attempt to resolve the Dispute promptly, equitably, and in a good faith manner, and
 - c. The Senior Managers will agree to subsequent meetings if both parties agree that further meetings are necessary to reach a resolution of the Dispute.

2. Arbitration.

- 2.1 Rules. If the parties are unable to resolve the Dispute by negotiation within 30 days from the Dispute notice, and unless otherwise informal discussions are extended by the mutual agreement, the Dispute will be decided by binding arbitration in accordance with Construction Industry Rules of the AAA, as amended herein. Although the arbitration will be conducted in accordance with AAA Rules, it will not be administered by the AAA, but will be heard independently.
- a. The parties will exercise best efforts to select an arbitrator within five business days after agreement for arbitration. If the parties have not agreed upon an arbitrator within this period, the parties will submit the selection of the arbitrator to one of the principals of the mediation firm of Scott & Skelly, LLC, who will then select the arbitrator. The parties will equally share the fees and costs incurred in the selection of the arbitrator.
 - b. The arbitrator selected must be an attorney with at least 15 years' experience with commercial construction legal matters in Maricopa County, Arizona, be independent, impartial, and not have engaged in any business for or adverse to either Party for at least 10 years.
- 2.2 Discovery. The extent and the time set for discovery will be as determined by the arbitrator. Each Party must, however, within 10 days of selection of an arbitrator deliver to the other Party copies of all documents in the delivering party's possession that are relevant to the dispute.

2.3 Hearing. The arbitration hearing will be held within 90 days of the appointment of the arbitrator. The arbitration hearing, all proceedings, and all discovery will be conducted in Glendale, Arizona unless otherwise agreed by the parties or required as a result of witness location. Telephonic hearings and other reasonable arrangements may be used to minimize costs.

2.4 Award. At the arbitration hearing, each Party will submit its position to the arbitrator, evidence to support that position, and the exact award sought in this matter with specificity. The arbitrator must select the award sought by one of the parties as the final judgment and may not independently alter or modify the awards sought by the parties, fashion any remedy, or make any equitable order. The arbitrator has no authority to consider or award punitive damages.

2.5 Final Decision. The Arbitrator's decision should be rendered within 15 days after the arbitration hearing is concluded. This decision will be final and binding on the Parties.

2.6 Costs. The prevailing party may enter the arbitration in any court having jurisdiction in order to convert it to a judgment. The non-prevailing party will pay all of the prevailing party's arbitration costs and expenses, including reasonable attorney's fees and costs.

3. **Services to Continue Pending Dispute.** Unless otherwise agreed to in writing, Consultant must continue to perform and maintain progress of required Services during any Dispute resolution or arbitration proceedings, and City will continue to make payment to Consultant in accordance with this Agreement.

4. **Exceptions.**

4.1 Third Party Claims. City and Consultant are not required to arbitrate any third-party claim, cross-claim, counter claim, or other claim or defense of a third party who is not obligated by contract to arbitrate disputes with City and Consultant.

4.2 Liens. City or Consultant may commence and prosecute a civil action to contest a lien or stop notice, or enforce any lien or stop notice, but only to the extent the lien or stop notice the Party seeks to enforce is enforceable under Arizona Law, including, without limitation, an action under A.R.S. § 33-420, without the necessity of initiating or exhausting the procedures of this Exhibit.

4.3 Governmental Actions. This Exhibit does not apply to, and must not be construed to require arbitration of, any claims, actions or other process filed or issued by City of Glendale Building Safety Department or any other agency of City acting in its governmental permitting or other regulatory capacity.