

AMENDMENT NO. 001
Thunderbird Reservoir Upgrades
(CIP Project No. 212233.1, Contract No. C22-0540)

This Amendment No. One (“Amendment”) to the Professional Services Agreement (“Agreement”) is made this _____ day of _____, 2023, (“Effective Date”), by and between the City of Glendale, an Arizona municipal corporation (“City”) and Wilson Engineers, LLC, an Arizona limited liability company authorized to do business in Arizona (“Contractor”).

RECITALS

- A. City and Wilson Engineers (“Contractor”) previously entered into a Professional Services Agreement, Contract No. C22-0540, dated May 25, 2022 (“Agreement”); and
- B. The study phase of the Thunderbird Reservoir Upgrades has been completed which included an assessment of the roof and its supporting structure, along with recommendations for their rehabilitation, assessment of potential mechanical and electrical improvements, and the selection of a Construction Manager at Risk (CM@R) to provide pre-construction services, cost estimates and construction of proposed improvements.
- C. Expanding the scope of work (under Exhibit B) under the original agreement will include the design for the recommended roof rehabilitation improvements, coordination with the CM@R, and construction administration services for roof rehabilitation along with the design of mechanical and electrical improvements for the Thunderbird Reservoir.
- D. 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 two-year period from May 25, 2023 through May 24, 2025, 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 work under this amendment will provide engineering and construction administration services as described in the attached exhibits.
4. **Compensation.** Including allowances, the Thunderbird Reservoir Upgrades Study resulted in a previous compensation of \$34,250. Including allowances, the Thunderbird Reservoir design and construction administration services for the roof rehabilitation project and the mechanical and electrical improvements will result in an additional increase in compensation of \$457,685 and as shown in Exhibit D (for a total compensation, including allowances of \$491,935).
5. **Insurance Certificate.** Current certificate will expire on January 1, 2024 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

Wilson Engineers, LLC
An Arizona limited liability company



By: Stephen M. Todd

Its: Principal

4/29/2021

EXHIBIT A

PROFESSIONAL SERVICES AGREEMENT

The City of Glendale owns and operates the Thunderbird Reservoir that is utilized to store water and maintain hydraulic grade for Pressure Zone 2 in the City's potable water distribution system. The Thunderbird Reservoir was installed in the mid 1980's and several components at the facility are near the end of their useful life. A structural inspection of the roof system was performed in October 2022 and identified improvements required to the roof system.

The purpose of this project is to rehabilitate the existing facility by replacing and upgrading the reservoir roof and addressing structural concerns. This project will focus on the roof rehabilitation and will be constructed during the winter of 23/24. The City will initiate a separate project that will design and construct the mechanical and electrical improvements. The following presents the detailed Scope of Services to prepare construction documents and obtain required permits to rehabilitate the Thunderbird Reservoir Roof.

EXHIBIT B

SCOPE OF WORK

See attached Scope of Work dated December 8, 2022 which includes design and Construction Management Activities.

**City of Glendale, Arizona
Thunderbird Reservoir Roof Rehabilitation
Scope of Services**

December 8, 2022

The City of Glendale owns and operates the Thunderbird Reservoir that is utilized to store water and maintain hydraulic grade for Pressure Zone 2 in the City's potable water distribution system. The Thunderbird Reservoir was installed in the mid 1980's and several components at the facility are near the end of their useful life. The purpose of this project is to rehabilitate the existing facility by replacing and upgrading several components of the facility. The City has performed water quality evaluations of the existing facility and identified upgrades to improve water quality. A structural inspection of the roof system was performed in October 2022 and identified improvements required to the roof system.

The City has elected to separate the identified improvements into two separate projects. This project will focus on the roof rehabilitation and will be constructed during the winter of 23/24. The City will initiate a second project that will design and construct the mechanical and electrical improvements. The following presents the detailed Scope of Services to prepare construction documents and obtain required permits to rehabilitate the Thunderbird Reservoir Roof.

Project Elements

The following major facility components and services are assumed to be included in the design effort for this project:

- Remove and replace the entire metal roof decking with a new standing seam metal roof
- Install new ridge vent and perimeter eave vent
- Install new walkways and access hatches on roof
- Replace girder and purlin wall connections and expansion joints
- Sandblast and recoat purlins and girders as identified in the October 2022 inspection. Alternative to sandblasting for surface preparation and purlin replacement will be evaluated to minimize the amount of sandblasting necessary.
- Repair all structural deficiencies identified in the October 2022 inspection
- Concept design for water quality improvements necessary to identify access hatch locations and sizing as well as chlorine solution feed piping. The design of the access hatches and chlorine solution feed piping will be included in the roof design

for this project. The detailed design of the water quality improvement equipment will be a future project.

- Asset Management Requirements. Prepare facility information to incorporate into the City's current WSD Asset Management program including: drawings, asset lists, asset attributes, PM requirements, warranty information, assign asset numbering for entire facility per current City asset management standards. The asset management spreadsheet is due at the 90% drawings (minus the equipment serial numbers). All asset ID's must show on the 90% plans. The City will not grant substantial completion for any portion of the project until the asset management spreadsheet is 100% complete, correctly populated, and accepted by the City. The contractor will be responsible for maintaining new assets until the asset management spreadsheet is accepted by the City.

It is assumed that the following permits will be procured as part of this project:

- Approval to Construct for the project from MCESD and AOC.
- ADWR Jurisdictional Dam Construction Permit
- Building Permit from the City

The following items are excluded from this Scope of Services:

- Design of underground pipeline rehabilitation or replacement.
- Potholing services to locate buried utilities in the project area.
- Title research and/or boundary survey services are not included.
- Radio Path Study: In the event a radio path study is required it will be specified to be conducted by the Contractor.
- Off-site improvements to sewer, water, other infrastructure outside of the limits of the reservoir site.
- Topographic surveying services. It is assumed that information on the as-built drawings is suitable to create a site plan suitable for the design and permitting of this project.
- Geotechnical investigation services.
- Landscaping services for the interior or exterior portions of the site.
- ADWR Permit fee
- Any work not specifically identified as being part of this scope of work or allowances shall be clearly identified in advance and no such work shall be started without prior written authorization from the City's Engineering Project Manager.

The Engineering services to be provided under this Project are as follows:

TASK 1.0 PRELIMINARY DESIGN AND DEVELOPMENT

Subtask 1.1 Kick-Off Meeting. A kickoff meeting with representatives from Engineer, Contractor, and the City will be conducted at project initiation. The following will be accomplished:

- Introduce key team members and establish lines of communication
- Review the project scope and schedule
- Identify key issues affecting project development
- Request background information
- Discuss and identify preferred system operation, equipment, and suppliers for the civil, mechanical, electrical, instrumentation, and control equipment.
- Wilson Engineers to prepare and distribute meeting minutes to the attendees.

Subtask 1.2 Data Collection, Review, and Design Coordination. Collect and review background information for the site. Engineer shall coordinate, compile and review the available information regarding the existing site conditions including:

- Coordinate with City regarding the property limits.
- As-Built Drawings for site.
- Past reservoir operating level and flow rate data.
- Current City Reservoir Facility Design Standards.

Subtask 1.3 Design Basis Report / 30% Design. Prepare a detailed design report for submittal to the City and MCESD. Based on the available data, site investigations, and the City's current design standards, the Engineer will prepare a design report for the project that includes the facility layout, design criteria and standards for the reservoir roof rehabilitation, identification of any additional design issues and recommendations. This task will also include coordinating with up to two TTHM mitigation equipment vendors to develop concept designs for locations of aerators, mixers, and mechanical ventilation fans. This information will be reviewed with the City and utilized as the basis to identify the locations and sizing of roof openings that will be designed in this project to facilitate the installation of water quality improvement in a future project.

To support the design report, the Engineer shall prepare preliminary 30% plans. The following plans are anticipated to be included with the design report:

1. Civil: Site plan.
2. Reservoir Roof Structure: deck plan, purlin plan, girder plan, sections, and details

The Engineer will submit one (1) electronic copy (in .pdf format) to the City and Contractor. A review meeting will be conducted to discuss comments on the Design Basis Report. The Engineer shall incorporate the City and Contractor's comments into a Final Design Report.

TASK 2.0 CONTRACT DOCUMENT PREPARATION

Subtask 2.1 Preparation of 60% Plans. The Engineer will incorporate the comments received on the Detailed Design Report / 30% submittal and prepare a 60% submittal for review by the City and Contractor. A review meeting will be conducted to discuss comments on the 60% plan submittal and confirm the desired elements to be included in the Agency Review permit submittal.

Subtask 2.2 Preparation of Agency Review Construction Documents (90%). The Engineer shall prepare preliminary (90%) construction documents for including plans and specifications. The plans shall incorporate the comments received on the 60% submittal and the review meeting.

The Engineer will submit one (1) electronic copy (in .pdf format) to the City and Contractor. In addition, electronic copies (in .pdf format) will be provided to MCESD for Approval to Construct (see Subtask 3.1). An Agency review design workshop will be conducted to discuss any comments received from the City, Contractor, and MCESD.

Subtask 2.3 Preparation of 100% Plans and Specifications. The final 100% plans and specifications will be prepared incorporating the City and Maricopa County's comments. The Engineer will submit one (1) electronic copy (in .pdf format) to the Final plans and specifications to the City and Contractor.

TASK 3.0 PERMITTING SERVICES

Subtask 3.1 Maricopa County Environmental Services Department. The Engineer shall prepare the Approval to Construct Application and coordinate with the City for signatures. The Engineer shall then submit one set of the agency review plans and specifications to the Maricopa County Environmental Services Department for review. One review meeting will be conducted to discuss any comments received from the County. The Engineer shall respond to the County's comments and incorporate the comments into the Final Construction Documents.

Subtask 3.2 City of Glendale Building Safety. The Engineer shall complete the Building Permit application and related requirements and submit the Agency Review Plans and Specifications to the City Building Safety Department for approval. The Engineer shall coordinate with the Building Safety Department and provide additional information as requested.

Subtask 3.3 ADWR Jurisdictional Dam Construction Permit. The Engineer shall complete the ADWR Permit application and related requirements (Construction Quality Assurance Plan Report) and submit the Agency Review Plans and Specifications to the ADWR for approval. The Engineer shall coordinate with ADWR and provide additional information as requested.

TASK 4.0 PROJECT COORDINATION – DESIGN PHASE

The Engineer will perform project administration services as described in the following subtasks:

Subtask 4.1 Project Coordination Meetings with the City and Contractor. The Engineer will conduct meetings and/or workshops with City Staff to discuss specific technical aspects of the design; progress in the development of the design, drawings, and specifications; and related issues that may affect Project results. The meetings or workshops will likely consist of the following:

- A detailed Design Kick-off Workshop with City staff and the Contractor;
- Review Workshops – The Engineer will conduct a total of three (3) design review workshops with City staff and the Contractor;
- Progress or Miscellaneous Meetings for months with no other meetings scheduled, quantity – 2 virtual or in person.

The Engineer will prepare and distribute meeting agenda and document meeting results for each meeting and workshop. A total of nine (9) progress meetings (including workshops) are planned

TASK 5.0 CONTRACTOR PRICING PHASE ASSISTANCE

Subtask 5.1 Response to Questions/Prepare Addenda. The Engineer will respond to questions from Contractor during preparation of cost models and construction contract pricing, when required review application for “pre-approved equal”, and prepare necessary addenda to the contract documents.

Subtask 5.2 Review Contractors Pricing. The Engineer will review the Contractors cost model for the project, compare against the contract documents and, provide the City comments.

TASK 6.0 CONSTRUCTION PHASE SERVICES

Subtask 6.1 Preconstruction Conference. Conduct a preconstruction conference with the Contractor, the City and other interested parties prior to issuance of the Notice to Proceed.

Subtask 6.2 Construction Observations. The Engineer shall provide on-site construction observation services for all items of work required by the contract documents. The Engineer shall monitor construction for compliance with the project plans and specifications. The on-site representative shall be available for a minimum of 50 percent of the contract construction period. The on-site representative shall visit the project site during the course of critical construction activities, but not less than two times per week, depending on the status of work per the Contractor's construction schedule.

Subtask 6.3 Construction Schedule Review. The Engineer shall review the construction schedule with particular emphasis on assuring that reasonable time allowances have been made for the work required. The Engineer shall observe construction progress and maintain and issue a monthly construction observation report. All updated schedules must be reviewed and approved prior to issuance of monthly progress payments to the Contractor.

Subtask 6.4 Submittal Reviews. The Engineer shall review and approve all shop drawings. The Engineer will advise the Contractor before the commencement of any work requiring a shop drawing or sample submission if the submission has not been accepted by Engineer. The Engineer shall maintain a submittal log and coordinate all reviews and any necessary resubmittals.

Subtask 6.5 Conduct Project Meetings. The Engineer shall conduct bi-weekly construction project meetings, prepare an agenda and minutes of the meeting, and distribute to all attendees.

Subtask 6.6 Review Contractors Payment Applications. Review the Contractor's initial and updated schedule of estimated monthly payments and advise the City as to acceptability. Review the Contractor's monthly payment requests, and forward to the City for final approval and processing. The Engineer's review shall be for the purpose of making an independent opinion of work completed and mathematical check of the Contractor's payment request. Engineer is responsible for verifying the quantities of work which are the basis of the payment requests. The final monthly pay requests will be approved and processed by the City.

Subtask 6.7 RFI's and Change Order Requests. The Engineer will interpret construction contract documents and respond when requested by the City or Contractor for a clarification. The Engineer shall review and make recommendations on all change order requests from the Contractor, including applications for extension of construction time. Evaluate the cost and scheduling aspects of all change orders. No change order shall be implemented without the prior approval of the City.

Subtask 6.8 Substantial and Final Completion. Upon substantial completion, inspect the construction work and prepare a punch-list of those items to be completed or corrected before final completion of the project. Submit results of the inspection to the City and the Contractor. The Engineer will maintain a running deficiency list and keep the Contractor informed as to its current status. The Engineer will conduct, with the assistance of the City, a final inspection and prepare a final punch list, including all items remaining on the deficiency list, as well as any additional items discovered during the final inspection.

Subtask 6.9 As-Built Drawings. The Engineer shall prepare record as-built drawings of the completed work based upon markups from the Contractor's record drawings and deliver the drawings to the City upon completion of the work. The record drawings will be submitted in pdf and AutoCAD format.

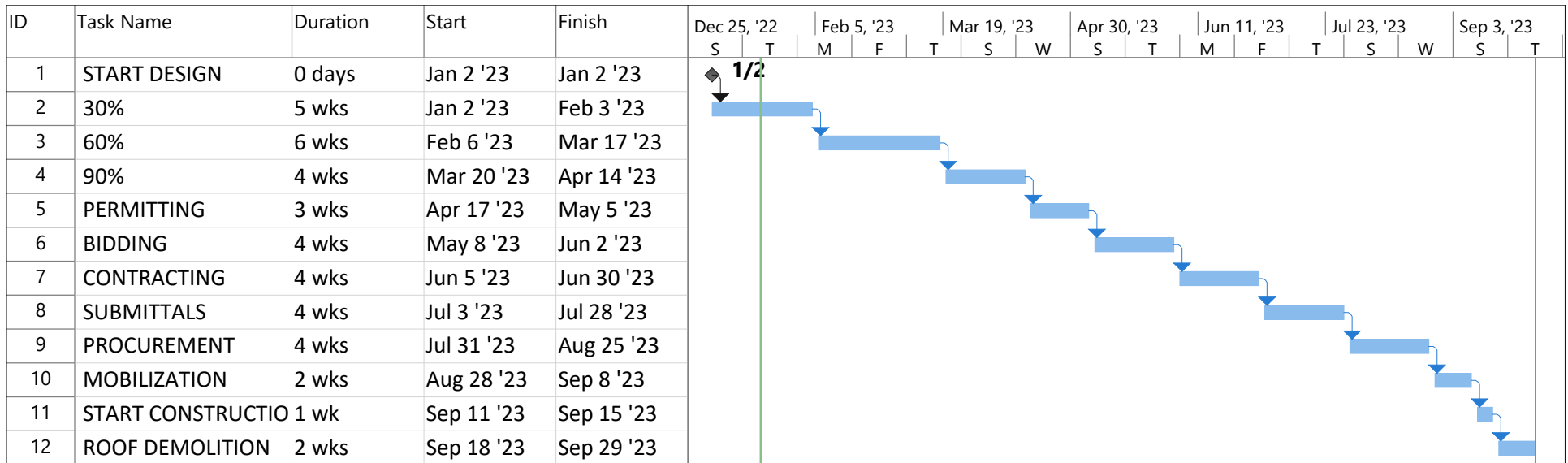
Subtask 6.10 MCESD AOC. The Engineer shall prepare the Engineers Certificate of Completion and application required for submittal to the Maricopa County Environmental Services Department (MCESD) to obtain the Approval of Construction (AOC) for the project.

END SCOPE OF SERVICES

EXHIBIT C

DESIGN SCHEDULE

See attached Design Schedule



Project: Glendale T-Bird Res Re Date: Jan 18 '23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	◆
	Milestone	◆	Duration-only		Deadline	↓
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone	◆	Finish-only			

EXHIBIT D

COMPENSATION

METHOD AND AMOUNT OF COMPENSATION

Compensation shall be on an hourly rate basis plus allowable reimbursable expenses

NOT-TO-EXCEED AMOUNT

The total amount of compensation paid to the Consultant for full completion of all the work required by the project during the entire term of the project shall not exceed \$457,685

DETAILED PROJECT COMPENSATION

See attached spreadsheet for details



City of Glendale
Thunderbird Reservoir
Roof Rehabilitation Project
FEE BREAKDOWN

December 8, 2022

Task	Roof Rehabilitation Task Description	Fee
Task 1.0 - Preliminary Design and Development		
1.1	Kickoff Meeting	\$ 1,870
1.2	Data Collection, Review, and System Design Coordination	\$ 720
1.3.1	Draft Basis of Design Report	\$ 25,440
1.3.2	Preliminary 30% Engineering Design Plans	\$ 30,620
	Subtotal	\$ 58,650
Task 2.0 - Contract Document Preparation		
2.1	Preparation of 60% Plans	\$ 38,210
2.2	Preparation of Agency Review Construction Documents (90%)	\$ 46,850
2.3	Preparation of 100% Plans and Specifications	\$ 20,350
	Subtotal	\$ 105,410
Task 3.0 - Permitting Services		
3.1	MCESD Approval to Construct Permit	\$ 3,485
3.2	City of Glendale - Building Safety Review	\$ 4,145
3.3	ADWR - Jurisdictional Dam Construction Permit	\$ 8,315
	Subtotal	\$ 15,945
Task 4.0 - Project Coordination and Meetings (Design Phase)		
4.1	Project Coordination Meetings	\$ 34,400
	Subtotal	\$ 34,400
Task 5.0 - Contractor Pricing Phase Assistance		
5.1	Contractors Questions/Addenda	\$ 5,530
5.2	Review Contractors Pricing	\$ 5,195
	Subtotal	\$ 10,725
Task 6.0 - Construction Phase Services		
6.1	Preconstruction Conference	\$ 1,460
6.2	Construction Observations	\$ 78,960
6.3	Schedule Review	\$ 4,680
6.4	Submittal Reviews	\$ 26,620
6.5	Project Meetings	\$ 19,740
6.6	Review Pay Applications	\$ 4,080
6.7	RFI's and Change Order Requests	\$ 15,940
6.8	Substantial and Final Completion	\$ 9,720
6.9	As-Built Drawings	\$ 11,195
6.10	MCESD AOC	\$ 3,030
	Subtotal	\$ 175,425
SUBTOTAL - WILSON LABOR SUMMARY		\$ 389,830

EXPENSE/ALLOWANCE SUMMARY

Task #	Expense Description	Unit	Total
1.0	Structural Engineer - Design	Allowance	\$ 31,000
2.0	Structural Engineer - Construction	Allowance	\$ 10,000
3.0	MCESD Review Fees	Allowance	\$ 2,500
4.0	Glendale - Plan Review Fee	Sheets/Reviews	\$ 14,355
5.0	Misc. Engineering Allowance	Allowance	\$ 10,000
SUBTOTAL - EXPENSE SUMMARY			\$ 67,855

Item	Roof Rehabilitation Task Description	Amount
I.	ROOF REHABILITATION LABOR	\$ 389,830
II.	EXPENSE/ALLOWANCE SUMMARY	\$ 67,855
III.	SUBTOTAL DESIGN AND CONSTRUCTION SERVICES	\$ 457,685

Item	TOTAL CONTRACT AMOUNT	Amount
A	PREVIOUS COMPENSATION FOR STUDY	\$ 34,250
B	SUBTOTAL DESIGN AND CONSTRUCTION SERVICES	\$ 457,685
C	TOTAL ROOF REHAB. DESIGN & CONSTRUCTION SERVICES	\$ 491,935