PROFESSIONAL SERVICES AGREEMENT BETWEEN APACHE JUNCTION WATER UTILITIES COMMUNITY FACILITIES DISTRICT AND CAROLLO ENGINEERS, INC. FOR DIRECT POTABLE REUSE DEMONSTRATION PROJECT

THIS AGREEMENT is made as of the ____ day of ____ 20___ (the "Effective Date") by and between APACHE JUNCTION WATER UTILITIES COMMUNITY FACILITIES DISTRICT, an Arizona municipal corporation ("District"), and CAROLLO ENGINEERS, INC., a Delaware corporation ("Consultant"), both of which may be hereinafter referred to collectively as the "Parties" or individually as a "Party".

RECITALS

- A. District desires to retain a consultant to assist in Direct Potable Reuse Demonstration Project, Demonstration Scale Mobile Treatment Unit and to make payment for the same in accordance with the terms and conditions set forth in this Agreement, including all attachments and addenda which are appended hereto by mutual agreement of the Parties.
- B. The open market procedures have been satisfied to the extent they apply.
- C. The Parties have set forth below contemplated services Consultant will provide District, including payment terms for such services and products.

AGREEMENT

- NOW, THEREFORE, in consideration of the Recitals noted above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:
- 1. <u>CONSULTANT'S DUTIES</u>: Consultant agrees to perform the professional services detailed in Exhibit A.
- 2. <u>COMPENSATION</u>: The total amount payable by District to Consultant for professional services is an amount not to exceed One Hundred Ninety Nine Thousand Eighty Four Dollars and No Cents (\$199,084.00) annually, in accordance with the price sheet set forth in Exhibit B.
- 3. <u>CONSULTANT BILLING</u>: Consultant shall bill District on a time and expense basis in a total amount not to exceed Section 2 above. District shall pay such billings within thirty (30) calendar days of the date of receipt.
- 4. <u>TERM/RENEWAL</u>: The term of this Agreement starts on September 19, 2023 and ends on June 30, 2024.

- 5. <u>DISTRICT'S STANDARD OF PERFORMANCE</u>: District shall furnish Consultant with all data, information and other supporting services specified in Exhibit A.
- 6. <u>CONSULTANT'S STANDARD OF PERFORMANCE</u>: While performing the services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Phoenix Metropolitan Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise. Consultant shall be responsible for all errors and omissions Consultant commits in the performance of this Agreement.
- 7. <u>NOTICES</u>: All notices to a Party required under this Agreement shall be in writing and sent by first class certified mail, postage prepaid, return receipt requested, addressed to the following:

If to District: Apache Junction Water District

Attn: Water District Director 300 East Superstition Boulevard Apache Junction, AZ 85119

And to: R. Joel Stern, District Counsel

c/o City of Apache Junction 300 East Superstition Boulevard Apache Junction, AZ 85119

If to Consultant: Carollo Engineers, Inc.

Attn: Mark Gross, Senior Vice President 4600 East Washington Street, Suite 500

Phoenix, AZ 85034

8. <u>INSURANCE</u>: Consultant, at its own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly licensed, possessing a current A.M. Best, Inc. Rating of B++6, or approved unlicensed in the State of Arizona with policies and forms satisfactory to District.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Agreement is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of District, constitute a material breach of this Agreement.

Consultant's insurance shall be primary insurance as respects the District, and any insurance or self-insurance maintained by District shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect District.

The insurance policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against District, its agents, officers, officials and employees for any claims arising out of Consultant's acts, errors, mistakes, omissions, work or service.

The insurance policies may provide coverage which contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to District under such policies. Consultant shall be solely responsible for the deductible and/or self-retention and District, at its option, may require Consultant to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.

District reserves the right to request and to receive, within ten (10) working days, certified copies of any or all of the herein required insurance policies and/or endorsements. District shall not be obligated, however, to review same or to advise Consultant of any deficiencies in such policies and endorsements, and such receipt shall not relieve Consultant from, or be deemed a waiver of, District's right to insist on strict fulfillment of Consultant's obligations under this Agreement.

The insurance policies, except Workers' Compensation and Professional Liability, required by this Agreement, shall name District, its agents, officers, officials and employees as Additional Insureds.

REQUIRED COVERAGE

Commercial General Liability

Consultant shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$2,000,000 General Aggregate limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification provisions of this Agreement, which coverage will be at least as broad as that on Insurance Service Office, Inc. Policy Form No. CG 00011093, or the equivalent thereof.

Such policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, nor any provision which would serve to limit third party action over claims.

The Commercial General Liability additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form

B, CG 20101185, or the equivalent thereof, and shall include coverage for Consultant's operations and products and completed operations.

If required by this Agreement, if Consultant sublets any part of the work, services or operations, Consultant shall purchase and maintain, at all times during prosecution of the work, services or operations under this Agreement, an Owner and Consultant's Protective Liability insurance policy for bodily injury and property damage, including death, which may arise in the prosecution of Consultant's work, service or operations under this Agreement. Coverage shall be on an occurrence basis with a limit not less than \$1,000,000 per occurrence, and the policy shall be issued by the same insurance company that issues Consultant's Commercial General Liability insurance.

Automobile Liability

Consultant shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to Consultant's owned, hired, and non-owned vehicles assigned to or used in performance of Consultant's work. Coverage will be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or the equivalent thereof). Such insurance shall include coverage for loading and off-loading hazards. If hazardous substances, materials or wastes are to be transported, MCS 90 endorsement shall be included and \$5,000,000 per accident limits for bodily injury and property damage shall apply.

Workers' Compensation

Consultant shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

By execution of this Agreement, Consultant certifies as follows:

"I am aware and understand the provisions of A.R.S. § 23-901 *et seq.* which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of this chapter, and I will comply with such provisions before commencing the performance of the work of this Agreement."

If Consultant has no employees for whom workers' compensation insurance is required, Consultant shall submit a declaration or affidavit to District so stating and covenanting to obtain such insurance if and when Consultant employs any employees subject to coverage.

In case any work is subcontracted, Consultant will require subcontractors to provide Workers' Compensation and Employer's Liability insurance to at least the same extent as required of Consultant.

Professional Liability

Consultant retained by District to provide the work or service required by this Agreement will maintain Professional Liability insurance covering acts, errors, mistakes and omissions arising out of the work or services performed by Consultant, or any person employed by Consultant, with a limit of not less than \$1,000,000 each claim.

Certificates of Insurance

Prior to commencing work or services under this Agreement, Consultant shall furnish District with Certificates of Insurance, or formal endorsements as required by the Agreement, issued by Consultant's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Agreement are in full force and effect. The form of the certificates of insurance and endorsements shall be subject to the approval of the Apache Junction City Attorney's Office, shall comply with the terms of this Agreement, and shall be issued and delivered to District Attorney, Apache Junction Water Utilities Community Facilities District, 300 East Superstition Boulevard, Apache Junction, AZ 85119.

In the event any insurance policies required by this Agreement are written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of Consultant's work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Agreement, a renewal certificate must be sent to District thirty (30) calendar days' prior to the expiration date.

All Certificates of Insurance shall be identified with bid serial number and title. Policies or certificates and completed forms of District's Additional Insured Endorsement (or a substantially equivalent insurance company form acceptable to the District Attorney) evidencing the coverage required by this section shall be filed with the District and shall include the District as an additional insured. The policy or policies shall be in the usual form of a public liability insurance, but shall also include the following provision:

"Solely as respects work done by or on behalf of the named insured for the Apache Junction Water Utilities Community Facilities District, it is agreed that the Apache Junction Water Utilities

Community Facilities District and its officers and employees are added as additional insureds under this policy."

Insurance required herein shall not expire, be canceled, or materially changed without thirty (30) calendar days' prior written notice to District.

- 9. <u>APPLICABLE LAW AND VENUE</u>: The terms and conditions of this Agreement shall be governed by and interpreted in accordance with the laws of the State of Arizona. Any action at law or in equity brought by either Party for the purpose of enforcing a right or rights provided for in this Agreement, shall be tried in a court of competent jurisdiction in Pinal County, State of Arizona. The Parties hereby waive all provisions of law providing for a change of venue in such proceeding to any other county or removal to federal jurisdiction. In the event either Party shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition in this Agreement, it is mutually agreed that the prevailing Party in such action shall recover all costs including: all litigation and appeal expenses, collection expenses, reasonable attorney fees, necessary witness fees and court costs to be determined by the court in such action.
- 10. FORCE MAJEURE: Neither District nor Consultant, as the case may be, shall be considered not to have performed its obligations under this Agreement in the event of enforced delay (an "Enforced Delay") due to causes beyond its control and without its fault or negligence or failure to comply with applicable laws, including, but not restricted to, acts of God, fires, floods, epidemics, pandemics, quarantine, restrictions, embargoes, labor disputes, and unusually severe weather or the delays of subcontractors or materialmen due to such causes, acts of a public enemy, war, terrorism or act of terror (including but not limited to bio-terrorism or eco-terrorism), nuclear radiation, blockade, insurrection, riot, labor strike or interruption, extortion, sabotage, or similar occurrence or any exercise of the power of eminent domain of any governmental body on behalf of any public entity, or a declaration of moratorium or similar hiatus (whether permanent or temporary) by any public entity directly affecting the obligations under this Agreement. In no event will Enforced Delay include any delay resulting from unavailability for any reason of labor shortages, or the unavailability for any reason of particular subcontractors, vendors or investors desired by Consultant in connection with the obligations under this Agreement. Consultant agrees that Consultant alone will bear all risks of delay which are not Enforced Delay. In the event of the occurrence of any such Enforced Delay, the time or times for performance of the obligations of the Party claiming delay shall be extended for a period of the Enforced Delay; provided, however, that the Party seeking the benefit of the provisions of this Section shall, within thirty (30) calendar days after such Party knows or should know of any such Enforced Delay, first notify the other Party of the specific delay in writing and claim the right to an extension for the period of the Enforced Delay; and provided further that in no event shall a period of Enforced Delay exceed ninety (90) calendar days.

- 11. <u>TERMINATION</u>: This Agreement may be terminated by either Party for any reason upon thirty (30) calendar days' written notice. If this Agreement is terminated, District shall be reimbursed from Consultant the amount paid for any undelivered and/or unaccepted products or services. Upon termination, District agrees to pay for all delivered, accepted, and properly invoiced services that were provided up to the announced Termination Date.
- To the fullest extent permitted by law, **12**. INDEMNIFICATION: Consultant shall defend, indemnify and hold harmless District, its elected and appointed officers, officials, agents, and employees from and against any and all liability including but not limited to demands, claims, actions, fees, costs and expenses, including reasonable attorney and expert witness fees, arising from, or alleged to have arisen from, relating to, arising out of, or alleged to have resulted from the acts, errors, mistakes, omissions, Work or services of Consultant, its agents, employees, or any tier of Consultant's subcontractors in the performance of this Agreement, but only to the extent caused by the negligence, recklessness or intentional wrongful conduct of Consultant or its subcontractors in the performance of the Work under this Agreement or any subcontract. Consultant's duty to defend, hold harmless and indemnify District, its special districts, elected and appointed officers, officials, agents, and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to. impairment, or destruction of property including loss of use resulting therefrom, caused by an Consultant's acts, errors, mistakes, omissions, work or services in the performance of this Agreement including any employee of Consultant, any tier of Consultant's subcontractor or any other person for whose acts, errors, mistakes, omissions, Work or services Consultant may be legally liable, but only to the extent caused by the negligence, recklessness or intentional wrongful conduct of Consultant or any tier of Consultant's subcontractors or any other person for whose acts, errors, mistakes, omissions, Work or services Consultant may be legally liable in the performance of the Work under this Agreement or subcontract. The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph. The rights and obligations under this Section shall survive termination of this Agreement.
- 13. <u>TAXES</u>: Consultant shall pay all license, sales, consumer, transaction privilege, use and other similar taxes for services provided by Consultant which are legally enacted at the time the obligations under this Agreement are performed.
- 14. <u>PERMITS & FEES</u>: Unless otherwise provided in this Agreement, Consultant shall secure and pay for all applicable permits, government fees, licenses and inspections necessary for the proper execution and completion of services which are customarily secured after execution of the Agreement. Consultant shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the

performance of the obligations. Consultant represents and warrants that any license necessary to perform the services under this Agreement is current and valid. Consultant understands that the activity described herein constitutes "doing business in the City of Apache Junction" and Consultant agrees to obtain a business license pursuant to Chapter 8 of the Apache Junction City Code, Vol. I, and keep such license current during the term of this Agreement. Consultant also acknowledges that the tax provision of the Apache Junction Tax Code, Chapter 8A, may also apply and if so, shall obtain a transaction privilege license and/or other licenses as may be required by all applicable laws. Further, Consultant agrees to pay all applicable privilege and use taxes that are applicable to the activities, products and services provided under this Agreement.

- 15. <u>RECORDS</u>: Records of Consultant's labor, payroll, and other costs pertaining to this Agreement shall be kept on a generally recognized accounting basis and made available to District for inspection on request. Consultant shall maintain records for a period of at least two (2) years after termination of this Agreement, and shall make such records available during that retention period for examination or audit by District personnel during regular business hours.
- 16. <u>RIGHT OF DISTRICT TO CONTRACT WITH OTHERS</u>: Nothing in this Agreement shall imply District is obligated to obtain the services described herein with only this particular Consultant.
- 17. <u>INDEPENDENT CONTRACTOR</u>: District and Consultant agree and understand that the relationship between both Parties is that of an independent contractor.
- 18. WAIVER OF TERMS AND CONDITIONS: The failure of District or Consultant to insist in any one or more instances on performance of any of the terms or conditions of this Agreement or to exercise any right or privilege contained herein shall not be considered as thereafter waiving such terms, conditions, rights or privileges, and they shall remain in full force and effect.
- 19. <u>COMPLIANCE WITH FEDERAL AND STATE LAWS</u>: Consultant understands and acknowledges the applicability of the American with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to the services performed under this Agreement.

As required by A.R.S. § 41-4401, Consultant hereby warrants its compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A). Consultant further warrants that after hiring an employee, Consultant will verify the employment eligibility of the employee through the E-Verify program. If Consultant uses any subcontractors in performance of services, subcontractors shall warrant their compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A), and subcontractors shall further warrant that after hiring an employee,

such subcontractor verifies the employment eligibility of the employee through the E-Verify program. A breach of this warranty shall be deemed a material breach of the Agreement that is subject to penalties up to and including termination of this Agreement. Consultant is subject to a penalty of \$100 per day for the first violation, \$500 per day for the second violation, and \$1,000 per day for the third violation. District at its option may terminate this Agreement after the third violation. Consultant shall not be deemed in material breach of this Agreement if the Consultant and/or subcontractors establish compliance with the employment verification provisions of Sections 274A and 274B of the federal Immigration and Nationality Act and the E-Verify requirements contained in A.R.S. § 23-214(A). District retains the legal right to inspect the papers of any Consultant or subcontractor employee who works under this Agreement to ensure that the Consultant or subcontractor is complying with the warranty. Any inspection will be conducted after reasonable notice and at reasonable times. If state law is amended, the Parties may modify this paragraph consistent with state law.

- 20. <u>ENTIRE AGREEMENT</u>: This Agreement and any attachments represent the entire agreement between District and Consultant and supersede all prior negotiations, representations or agreements, either express or implied, written or oral. It is mutually understood and agreed that no alteration or variation of the terms and conditions of this Agreement shall be valid unless made in writing and signed by the Parties hereto. Written and signed amendments shall automatically become part of the Supporting Documents, and shall supersede any inconsistent provision therein; provided, however, that any apparent inconsistency shall be resolved, if possible, by construing the provisions as mutually complementary and supplementary.
- **SEVERABILITY:** District and Consultant each believe that the 21. execution, delivery and performance of this Agreement are in compliance with all applicable laws. However, in the unlikely event that any provision of this Agreement is declared void or unenforceable (or is construed as requiring District to do any act in violation of any applicable laws), such provision shall be deemed severed from this Agreement and this Agreement shall otherwise remain in full force and effect; provided that this Agreement shall retroactively be deemed reformed to the extent reasonably possible in such a manner so that the reformed agreement (and any related agreements effective as of the same date) provide essentially the same rights and benefits (economic and otherwise) to the Parties as if such severance and reformation were not required. Unless prohibited by any applicable aws, the Parties further shall perform all acts and execute, acknowledge and/or deliver all amendments, instruments and consents necessary to accomplish and to give effect to the purposes of this Agreement, as reformed.
- 22. <u>SUCCESSORS</u>, <u>ASSIGNMENT & DELEGATION</u>: District and Consultant each bind themselves, their partners, successors, assigns and legal representatives to the other Party hereto and to the partners, successors,

assigns and legal representatives of such other Party in respect to all covenants, agreements and obligations contained in the Agreement. Neither Party to the Agreement shall assign the Agreement or sublet it as a whole or delegate the duties hereunder, without the written consent of the other, nor shall Consultant assign any monies due or to become due to it without the previous written consent of District.

- 23. ACCURACY OF WORK: Acceptance of services or work by District shall not relieve Consultant of the responsibility for subsequent correction of any such errors and the clarification of any ambiguities. Consultant shall make all necessary revisions or corrections resulting from errors and omissions on the part of Consultant without additional compensation.
- 24. <u>TIME IS OF THE ESSENCE</u>: Time is of the essence with respect to all provisions in this Agreement. Any delay in performance by either Party shall constitute a material breach of this Agreement.
- 25. PROHIBITION TO CONTRACT WITH CONSULTANTS WHO ENGAGE IN BOYCOTT OF THE STATE OF ISRAEL: The Parties acknowledge A.R.S. §§ 35-393 through 35-393.03, as amended, which forbids public entities from contracting with Consultants who engage in boycotts of the State of Israel. Should Consultant under this Agreement engage in any such boycott against the State of Israel, this Agreement shall be deemed automatically terminated by operation of law. Any such boycott is a material breach of contract.
- 26. CERTIFICATION PURSUANT TO A.R.S. § 35-394. In accordance with Arizona Revised Statutes § 35-394, Consultant hereby certifies and agrees that Consultant does not currently and shall not for the duration of this Agreement use: 1) the forced labor of ethnic Uyghurs in the People's Republic of China, 2) any services or goods produced by the forced labor of ethnic Uyghurs in the People's Republic of China, and/or 3) any suppliers, contractors subcontractors that use the forced labor or any services or goods produced by the forced labor of ethnic Uyghurs in the People's Republic of China. Consultant becomes aware during the term of this Agreement that Consultant is not in compliance with this Section, then Consultant shall notify the District within five (5) business days after becoming aware of such noncompliance. If Consultant does not provide the District with written certification that Consultant has remedied such noncompliance within one hundred eighty (180) days after notifying the District of such noncompliance, this Agreement shall terminate, except that if the Agreement termination date occurs before the end of such one hundred eighty (180) day remedy period, this Agreement shall terminate on such contract termination date.
- 27. <u>CONFLICTS OF INTEREST</u>: This Agreement is subject to, and may be terminated by District in accordance with, the provisions of A.R.S. § 38-511.

IN WITNESS WHEREOF, Consultant and District have executed this Agreement as of the date first set forth above.

	CONSULTANT:
	CAROLLO ENGINEERS, INC., a Delaware corporation
	By:
	<u>DISTRICT</u> :
	APACHE JUNCTION WATER UTILITIES COMMUNITY FACILITIES DISTRICT, an Arizona municipal corporation
	By: Walter "Chip" Wilson Its: Chairman
ATTEST:	
Jennifer Pena Deputy District Clerk	
APPROVED AS TO FORM:	
R. Joel Stern District Attorney	

STATE OF		
STATE OF) COUNTY OF)	55.	
	g was subscribed and sworn 20, by as Delaware corporation.	
My Commission Expires:	Notary	Public
	•	
STATE OF ARIZONA COUNTY OF PINAL)) ss.)	
The foregoing day of,	y was subscribed and sworn 20, by Walter "Chip" Wils Utilities Community Facilitie	on, as Chairman of the
My Commission Expires:	Notary	v Public

EXHIBIT A SCOPE OF WORK



Apache Junction Water District – Direct Potable Reuse Demonstration Project Demonstration Scale Mobile Treatment Unit Scope of Services - Design DRAFT

BACKGROUND/PURPOSE

The Apache Junction Water District (DISTRICT) believes direct potable reuse (DPR) is likely to be a component of its long-term strategy for efficient and cost-effective use of reusable water supplies. As such, the DISTRICT is conducting a Direct Potable Reuse Demonstration Project (Project) with the objective of educating the community, customers, staff, leadership, and government officials on the viability and potential financial, resilience, and environmental benefits of DPR. The Project will also provide the DISTRICT information needed for future Arizona Department of Environmental Quality (ADEQ) review and compliance, and will be important for addressing Arizona's future anticipated performance-based regulations for a DPR system. The Project and the DISTRICT's future anticipated DPR will use advanced water purification facility (AWPF) treatment processes that will treat effluent from the Apache Junction Sewer District to potable water standards. This Project will allow the DISTRICT to explore and better understand the potential benefits and constraints of implementing DPR using AWPF facilities, including:

- Potential source water quality to be supplied for the AWPF
- Potential potable water quality from the AWPF
- Potential design and operational parameters for the AWPF

It is anticipated that the demonstration scale treatment processes for the APWF will be installed in a trailer that is capable of being towed by an appropriate size pick-up truck with a ball hitch. The demonstration trailer (mobile treatment unit) is anticipated to be stationed and operated at the DISTRICT's Non-Potable Water (NPW) reservoir located adjacent to the Apache Junction Sewer District's water reclamation facility (WRF). The WRF will supply the source water that would then be treated through the AWPF in the demonstration trailer. The WRF will be undergoing an expansion and process upgrades to a membrane bioreactor (MBR) treatment process using membrane filtration. The construction for these upgrades is anticipated to be completed in approximately three years.

The DISTRICT also anticipates towing the Project demonstration trailer to public engagements events (e.g. fairs, festivals, schools). A goal is for the demonstration trailer to include features to facilitate public education and interaction, including graphics and signs.

The approximate treatment capacity for the demonstration trailer will be around 5 gallons per minute (gpm). The demonstration trailer will include a flexible treatment train that includes, but may not be limited to, the following unit processes:

- MBR (depending on timing of WRF upgrades and ADEQ piloting requirements)
- Ozone

- Biologically Active Carbon (BAC) Filtration
- Ultrafiltration
- Granular Activated Carbon (GAC)
- High Dose Ultraviolet Light (UV) and potentially UV/Advanced Oxidation Process (UV/AOP)

This scope and fee consist of two exhibits:

- Exhibit A Scope of Services
- Exhibit B Fee Proposal

Carollo will provide design services and coordination as described in the following scope of services.

SCOPE OF SERVICES

The scope of work for this Project is for preliminary through final design of the demonstration trailer as well as optional services for preconstruction, construction, commissioning and start-up, and operational period support services. The scope of services includes the following project-specific tasks:

- Task 100 Project Management and Meetings
- Task 200 Preliminary Design
- Task 300 Detailed Design
- Task 400 Permitting and Regulatory Compliance Support
- Task 500 Miscellaneous Services Allowances

TASK 100 – PROJECT MANAGEMENT AND MEETINGS

Task 101 Project Management Coordination

Carollo will perform project management and monitoring activities, including conducting progress meetings, development of a project work plan and schedule, development of budget status tables to be included with monthly invoices, and coordination and collaboration with the DISTRICT.

Task 102 – Project Meetings

Kickoff Meeting

Carollo will conduct a project kickoff meeting with the DISTRICT to confirm the design goals and objectives, work plan, and schedule, and will provide an agenda in advance to the DISTRICT along with data requests.

Progress Meetings throughout Design

Carollo will conduct four progress meetings with the DISTRICT project team to collect relevant information, present progress to date, receive guidance on the design efforts, discuss issues and concerns, and monitor the progress of the work. Carollo will develop the meeting agenda and discussion materials. Following each progress meeting, Carollo will develop meeting minutes, including relevant action items, for distribution to the DISTRICT prior to the next progress meeting. These meetings will typically have a duration of approximately 1.5 - 2 hours.

Carollo will conduct deliverable review meetings to facilitate DISTRICT deliverable review and approval. Workshops will be held at Basis of Design Technical Memorandum, 90%, and 100% milestone deliverables. These workshops will have a duration of approximately 2 hours.

Deliverables

- Project Work Plan including schedule (one electronic PDF)
- Meeting agendas (electronic PDF prior to meeting, paper copies for attendees)
- Meeting minutes and exhibits (electronic PDF)
- Monthly invoices (electronic PDF)

TASK 200 – Preliminary Design

Task 201 – Define Project Design Criteria

Carollo will develop a design data summary that includes design calculations for applicable unit process equipment, tank, and pipe sizing. The design data summary will include relevant equipment cut sheets and vendor/manufacturer communications regarding equipment sizing and project application.

Task 202 – Determine Basis of Design

Carollo will conduct a half-day basis of design workshop to develop the design plan and provide the foundation for decisions. Carollo will document the basis of design, including the thought processes and assumptions behind design decisions, and provide explanations of the ideas, logic, evaluations, concepts, and criteria that are considered important to the DISTRICT.

Task 203 – Prepare Schematic Drawings

Carollo will prepare conceptual schematics of the potential configuration of openings, walkways, and audio/visual equipment and materials layout to accommodate demonstration interaction and learning objectives for discussion and selection of enclosure.

Task 204 – Prepare an Opinion of Probable Cost for Construction

Carollo will prepare an opinion of probable cost for construction materials and equipment based on the developed preliminary schematics and design information.

Task 205 – Basis of Design Technical Memorandum

The final effort in the preliminary design phase of the Project will be to produce a Basis of Design Technical Memorandum (TM) documenting the decisions made and design criteria necessary to advance design concepts to the detailed design phase, including applicable elements of the following:

- Treatment process design criteria
- Flows
- Influent characterization
- Finished water criteria and requirements.
- Treatment train configuration (flexible to allow unit processes to be taken on and offline and sequencing variation)
- Detention times and loading rates
- Equipment evaluation and selection
- Operational requirements
- Mobile unit enclosure evaluation and selection
- Life Safety Code analysis
- Criteria needed to safely move and secure treatment equipment/materials within the mobile
- Service load requirements
- Power supply panel requirements
- Control panel requirements
- Instrumentation and control cut sheets

- Control strategies
- Preliminary P&IDs
- Network architecture
- Commissioning and start-up recommendations and requirements

Deliverables

- Basis of Design Workshop agenda, presentation, and summary
- Basis of Design TM (draft and final), .pdf files delivered via email
- Opinion of probable cost for materials and equipment

TASK 300 – Detailed Design

Task 301 – Interim (90%) Design Submittal

Carollo will advance the design from the conceptual schematic design level provided within the Basis of Design Technical Memorandum to the 90% design. The 90% Design Submittal will include:

- 90% Design Drawings
- Drafts of each major unit process technical specifications and model numbers called out on the drawing as applicable

Task 302 – Final (100%) Design Submittal

Carollo will advance the design from 90% design to 100% design, inclusive of the following:

- 100% Design Drawings
- Major unit process technical specifications and model numbers called out on the drawing as applicable
- Finalized documentation of commissioning and start-up requirements
- Updated Opinion of Probable Cost for Construction

Deliverables

- 90%-level design submittal, .pdf submitted via email or file transfer site
 - Drawings and technical specs
- 100%-level design submittal, .pdf submitted via email or file transfer site
 - Drawings and technical specifications
 - Updated Opinion of Probable Cost for Construction

TASK 400 - PERMITTING AND REGULATORY COMPLIANCE SUPPORT

Task 401 Regulatory Compliance and Agency Approval

Carollo will assist the DISTRICT with permit applications, which may include the activities and tasks listed below:

- Coordinate and participate in meetings with the ADEQ regarding permit pre-submittals and submittal reviews
- Prepare technical submittals required to support 100% design approval from the ADEQ

Deliverables

 Design materials from other tasks, packaged to support permit applications as applicable for ADEQ, submitted electronically

TASK 500 – MISCELLANEOUS SERVICES - ALLOWANCES

Miscellaneous engineering services by Carollo may be necessary during the contract period that cannot be defined sufficiently at the time of execution of this contract. If required, the scope and cost of supplemental services will be negotiated with the DISTRICT. Miscellaneous services may include:

- Bid-phase services or preconstruction phase services, depending on how the demonstration trailer is procured, including answering questions from a contractor for his bid.
- Construction phase services
- Start-up and operational period support services

PROJECT ASSUMPTIONS

This Scope of Services is based on the following assumptions:

- 1. Meetings will be held at the DISTRICT or via remote participation unless otherwise agreed by the DISTRICT and Carollo. Efforts will be made to submit meeting agendas at least 2 days in advance.
- 2. Permitting support is limited to 120 hours of Carollo support.
- 3. Carollo will provide permitting assistance services as described in Task 400 but cannot control agency approval. Securing final approvals is the responsibility of the DISTRICT.
- 4. Each unit process may have its own data acquisition capabilities supplied by the manufacturer, assumed through Ethernet. Centralized monitoring and controls will be limited to the mobile unit itself. Because the unit is intended for mobile service, monitoring/controls will not be connected to the DISTRICT'S SCADA network. Coordination with the DISTRICT will be performed to include the optimal approach to electronically collect and store operating data that can be accessed for trending and analysis.
- 5. Adequate electrical capacity is assumed available at the NPW site.
- 6. Demonstration trailer will come with its own electrical and HVAC systems.
- 7. Design drawings and specifications are intended solely to guide equipment procurement and assembly of unit processes in the selected mobile trailer unit.
- 8. Minimal specifications will be necessary, as Carollo will rely on direct interaction with specific vendors. Specifications will consist primarily or entirely of unit process requirements to guide procurement of equipment.
- 9. Cost summary will rely primarily on equipment and material costs provided by equipment and material suppliers.
- 10. Technical specifications will be prepared in accordance with 1995 CSI Master Format. Carollo will use DISTRICT standard front-end documents or revise the front ends from the original Superstition Area Water Plant (SAWP) project. Carollo's Divisions 1-17 specifications will be used for the project.
- 11. No floodplain use permits or acquisition of rights-of-way or easements will be required for the project.
- 12. Carollo has no control over the cost of labor, materials, equipment, or services furnished by others, over the incoming water quality and/or quantity, or over the way DISTRICT'S plant and/or associated processes are operated and/or maintained. Data projections and estimates are based on Carollo's opinion based on experience and judgment. Carollo cannot and does not guarantee that actual costs and/or quantities realized will not vary from the data projections and estimates prepared by Carollo and Carollo will not be liable to and/or indemnify the

- DISTRICT and/or any third party related to any inconsistencies between Carollo's data projections and estimates and actual costs and/or quantities realized by the DISTRICT and/or any third party in the future, except to the extent such inconsistencies are caused by Carollo's negligent performance hereunder.
- 13. The services to be performed by Carollo are intended solely for the benefit of the DISTRICT. No person or entity not a signatory to the Project shall be entitled to rely on Carollo's performance of its services hereunder, and no right to assert a claim against Carollo by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Project or the performance of Carollo's services hereunder.
- 14. This scope does not include services during operation of the DPR demonstration-scale treatment unit.

SCHEDULE

The tentative completion schedule for this Scope of Work, including the projected completion of each task after Notice-to-Proceed (NTP), is estimated as follows:

Task	Tentative Task Duration (months)	Tentative Completion (months after NTP)		
Task 100 - Project Management and Meetings	8	8		
Task 200 - Preliminary Design	2	2		
Task 300 - Detailed Design	4	6		
Task 400 - Permitting and Regulatory Compliance Support	2	8		

The following construction schedule is provided for reference only. Carollo effort associated with the below tasks will have a separate scope/fee reviewed and approved by the DISTRICT.

Task	Tentative Task Duration (months)	Tentative Completion (months after NTP)		
Construction Complete	3	11		
Operational Period	TBD	TBD		
Final Completion/Decommissioning	TBD	TBD		

EXHIBIT B FEE SCHEDULE

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Apache Junction Water District – Direct Potable Reuse Demonstration Project										
EngineersWorking Wonders With Water Demonstration Scale Mobile Treatment Unit										
			Design							
		Exhibit	B - Fee Propo	sal						
		DRAF	T - August 20	23						
							er			
	-		<u>.</u>	ē	_	'n	_		Total Labor Hours Per Task	Total Labor Cost Per Task
TACKS	Senior Project Manager		Senior Engineer	Project Enginee	Engineer	Senior Designer	CAD Technician	Word Processing/ Clerical	ž.	⁸
TASKS	enior Proje Manager	Project Manager	Eng	Eng	ingi	Des	ļ ģ	ord	e apo	ogg
	Ma	A P	ō	ect	#	. <u>o</u>	1 2	> 5 5	al Li	ه ت
	Se		Sen	Proj	Staff	Sen	SE	•	Tota	Tot
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Task 100 - Project Management and Meetings										
101 - Project Management Coordination	10	24	4	0	0	0	0	4	42	\$10,270
102 - Project Meetings	9	15	15	15	14	0	0	0	68	\$15,336
Subtotal	19	39	19	15	14	0	0	4	110	\$25,606
Task 200 - Preliminary Design	2	4	4	4	8	0	0	0	22	\$4,642
201 - Define Project Design Criteria 202 - Determine Basis of Design	2	4	4	4	8	0	0	0	22	\$4,642
203 - Prepare Schematic Drawings	0	2	2	2	8	16	8	0	38	\$6,094
204 - Prepare an Opinion of Probable Cost for Construction	0	0	0	4	12	0	0	0	16	\$2,720
205 - Basis of Design Technical Memorandum	8	8	16	16	24	0	0	8	80	\$16,096
Subtotal	12	18	26	30	60	16	8	8	178	\$34,194
Task 300 - Detailed Design 301 - Interim (90%) Design Submittal	11	11	32	32	43	32	53	30	244	\$41,547
302 - Final (100%) Design Submittal	8	23	93	69	84	8	14	60	359	\$67,267
Subtotal		34	125	101	127	40	67	90	603	\$108,814
										· ,
Task 400 - Permitting and Regulatory Compliance Support										
401 - Permitting and Regulatory Compliance Assistance	4	6	10	40	70	0	0	10	140	\$25,470
Subtotal	4	6	10	40	70	0	0	10	140	\$25,470
Total Labor Hours	54	97	180	186	271	56	75	112	1,031	
Total Labor Hours	J	3,	100	100	2/1	30	,,	112	1,031	
Hourly Labor Rates	\$283	\$253	\$242	\$212	\$156	\$153	\$123	\$100		
Total Labor Costs	\$15,282	\$24,541	\$43,560	\$39,432	\$42,276	\$8,568	\$9,225	\$11,200		\$194,084
				Subconsultants			1			¢
							1			\$ - \$ -
								Total	Subconsultants	•
				Additional Expe	nses	1	1			•
				Task 500 - Misc.	Services - Allow					TBD
				Permitting Fees				ectly by District)		\$ -
	ļ			Reimbursables/F	Printing/Reprod	uction/Mileage (ODCs)	1		\$ 5,000
	-	+	-				 		Total Expenses	\$ 5,000
							 	TOTAL PLI	DGET ESTIMATE	\$ 199,084
		1				l		TOTAL BU	DOE I ESTIIVIATE	ş 199,084