

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into this ____ day of _____, 2020, by and between the City of Merced, a California Charter Municipal Corporation, whose address of record is 678 West 18th Street, Merced, California 95340, (hereinafter referred to as "City") and AARC Consultants, LLC, a Texas Limited Liability Company, whose address of record is P.O. Box 421168, Houston, Texas 77242 (hereinafter referred to as "Consultant").

WHEREAS, City is undertaking a project to conduct a Risk and Resilience Assessment (RRA) and prepare an Emergency Response Plan (ERP); and,

WHEREAS, Consultant represents that it possesses the professional skills to provide engineering evaluation services in connection with said project.

NOW, THEREFORE, the parties hereto, in consideration of the mutual covenants hereinafter recited, hereby agree as follows:

1. **SCOPE OF SERVICES.** The Consultant shall furnish the following services: Consultant shall provide the engineering evaluation services described in Exhibit "A" attached hereto.

No additional services shall be performed by Consultant unless approved in advance in writing by the City, stating the dollar value of the services, the method of payment, and any adjustment in contract time. All such services are to be coordinated with City and the results of the work shall be monitored by the Director of Public Works or designee. However, the means by which the work is accomplished shall be the sole responsibility of the Consultant.

2. **TIME OF PERFORMANCE.** All of the work outlined in the Scope of Services shall be completed in accordance with the Schedule outlined in Exhibit "B" attached hereto and incorporated herein by reference. By mutual agreement and written addendum to this Agreement, the City and the Consultant may change the requirements in said Schedule.

3. **TERM OF AGREEMENT.** The term of this Agreement shall commence upon the day first above written and end on December 31, 2021.

4. **COMPENSATION.** Payment by the City to the Consultant for actual services rendered under this Agreement shall be made upon presentation of an

invoice detailing services performed under the Scope of Services, in accordance with the fee schedule set forth in Exhibit "C" attached hereto and incorporated herein by reference. The Consultant agrees to provide all services required under the Scope of Services in Exhibit "A" within the compensation amount set forth in Exhibit "C". For Consultant's services rendered under this Agreement, City shall pay Consultant the not to exceed sum of One Hundred Nine Thousand Seven Hundred Seventy-Five Dollars (\$109,775.00).

5. **METHOD OF PAYMENT.** Compensation to Consultant shall be paid by the City after submission by Consultant of an invoice delineating the services performed.

6. **RECORDS.** It is understood and agreed that all plans, studies, specifications, data magnetically or otherwise recorded on computer or computer diskettes, records, files, reports, etc., in possession of the Consultant relating to the matters covered by this Agreement shall be the property of the City, and Consultant hereby agrees to deliver the same to the City upon termination of the Agreement. It is understood and agreed that the documents and other materials including but not limited to those set forth hereinabove, prepared pursuant to this Agreement are prepared specifically for the City and are not necessarily suitable for any future or other use.

7. **CONSULTANT'S BOOKS AND RECORDS.** Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to the City for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Consultant to this Agreement. Any records or documents required to be maintained shall be made available for inspection, audit and/or copying at any time during regular business hours, upon oral or written request of the City.

8. **INDEPENDENT CONTRACTOR.** It is expressly understood that Consultant is an independent contractor and that its employees shall not be employees of or have any contractual relationship with the City. Consultant shall be responsible for the payment of all taxes, workers' compensation insurance and unemployment insurance. Should Consultant desire any insurance protection, the Consultant is to acquire same at its expense.

In the event Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement is determined by a court of

competent jurisdiction or the California Public Employees Retirement System (PERS) to be eligible for enrollment in PERS as an employee of the City, Consultant shall indemnify, protect, defend, and hold harmless the City for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.

9. INDEMNITY. Consultant shall indemnify, protect, defend (with legal counsel selected by the City), save and hold City, its officers, employees, and agents, harmless from any and all claims or causes of action for death or injury to persons, or damage to property resulting from intentional or negligent acts, errors, or omissions of Consultant or Consultant's officers, employees, volunteers, and agents during performance of this Agreement, or from any violation of any federal, state, or municipal law or ordinance, to the extent caused, in whole or in part, by the willful misconduct, negligent acts, or omissions of Consultant or its employees, subcontractors, or agents, or by the quality or character of Consultant's work, or resulting from the negligence of the City, its officers, employees, volunteers and agents, except for loss caused by the sole negligence or willful misconduct of the City or its officers, employees, volunteers or agents. It is understood that the duty of Consultant to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. Acceptance by City of insurance certificates and endorsements required under this Agreement does not relieve Consultant from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall survive the termination of this Agreement and shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Consultant acknowledges and agrees to the provisions of this Section and that it is a material element of consideration.

10. INSURANCE. During the term of this Agreement, Consultant shall maintain in full force and effect at its own cost and expense, the following insurance coverage:

a. Workers' Compensation Insurance. Full workers' compensation insurance shall be provided with a limit of at least One Hundred Thousand Dollars (\$100,000) for any one person and as required by law, including Employer's Liability limits of \$1,000,000.00 per accident. The policy shall be endorsed to waive the insurer's subrogation rights against the City.

b. General Liability.

- (i) Consultant shall obtain and keep in full force and effect general liability coverage at least as broad as ISO commercial general liability coverage occurrence Form CG 0001.
- (ii) Consultant shall maintain limits of no less than One Million Dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage.
- (iii) The City, its officers, employees, volunteers and agents are to be named as additional insureds under the policy, as respects liability arising out of work or operations performed by or on behalf of the Consultant.
- (iv) The policy shall stipulate that this insurance will operate as primary insurance for work performed by Consultant and its sub-contractors, and that any other insurance or self insurance maintained by City or other named insureds shall be excess and non-contributory.
- (v) Consultant shall maintain its commercial general liability coverage for three (3) years after completion of the work and shall add an additional insured endorsement form acceptable to the City naming the City of Merced, its officers, employees, agents and volunteers for each year thereafter for at least three (3) years after completion of the work. Copies of the annual renewal and additional insured endorsement form shall be sent to the City within thirty (30) days of the annual renewal.

c. Automobile Insurance.

- (i) Consultant shall obtain and keep in full force and effect an automobile policy of at least One Million Dollars (\$1,000,000) per accident for bodily injury and property damage.
- (ii) The City, its officers, employees, volunteers and agents are to be named as additional insureds under the policy, as respects automobiles owned, leased, hired or borrowed by the Consultant.

- (iii) The policy shall stipulate that this insurance will operate as primary insurance for work performed by Consultant and its sub-contractors, and that any other insurance or self insurance maintained by City or other named insureds shall be excess and non-contributory.

d. Professional Liability Insurance. Consultant shall carry professional liability insurance appropriate to Consultant's profession in the minimum amount of One Million Dollars (\$1,000,000). Architects and engineers' coverage is to be endorsed to include contractual liability.

e. Qualifications of Insurer. The insurance shall be provided by an acceptable insurance provider, as determined by City, which satisfies all of the following minimum requirements:

- (i) An insurance carrier admitted to do business in California and maintaining an agent for service of process within this State; and,
- (ii) An insurance carrier with a current A.M. Best Rating of A:VII or better (except for workers' compensation provided through the California State Compensation Fund).

f. Certificate of Insurance. Consultant shall complete and file with the City prior to engaging in any operation or activity set forth in this Agreement, certificates of insurance evidencing coverage as set forth above and which shall provide that no cancellation or expiration by the insurance company will be made during the term of this Agreement, without thirty (30) days written notice to City prior to the effective date of such cancellation—including cancellation for nonpayment of premium.

g. Notwithstanding any language in this Agreement to the contrary, Consultant shall be entitled to be paid pursuant to the terms of this Agreement until Consultant has obtained the insurance required by this Section 10 and provided documentation of said insurance to the City. In addition to any other remedies City may have, City reserves the right to withhold payment if Consultant's insurance policies are not current.

11. ASSIGNABILITY OF AGREEMENT. It is understood and agreed that this Agreement contemplates personal performance by the Consultant and is

based upon a determination of its unique personal competence and experience and upon its specialized personal knowledge. Assignments of any or all rights, duties or obligations of the Consultant under this Agreement will be permitted only with the express written consent of the City.

12. **TERMINATION FOR CONVENIENCE OF CITY.** The City may terminate this Agreement any time by mailing a notice in writing to Consultant that the Agreement is terminated. Said Agreement shall then be deemed terminated, and no further work shall be performed by Consultant. If the Agreement is so terminated, the Consultant shall be paid for that percentage of the phase of work actually completed, based on a pro rata portion of the compensation for said phase satisfactorily completed at the time the notice of termination is received.

13. **CONFORMANCE TO APPLICABLE LAWS.** Consultant shall comply with its standard of care regarding all applicable Federal, State, and municipal laws, rules and ordinances. No discrimination shall be made by Consultant in the employment of persons to work under this contract because of race, color, national origin, ancestry, disability, sex or religion of such person.

Consultant hereby promises and agrees to comply with all of the provisions of the Federal Immigration and Nationality Act (8 U.S.C.A. 1101 *et seq.*), as amended; and in connection therewith, shall not employ unauthorized aliens as defined therein. Should Consultant so employ such unauthorized aliens for the performance of work and/or services covered by this Agreement, and should any agency or instrumentality of the federal or state government, including the courts, impose sanctions against the City for such use of unauthorized aliens, Consultant hereby agrees to, and shall, reimburse City for the cost of all such sanctions imposed, together with any and all costs, including attorneys' fees, incurred by the City in connection therewith.

14. **WAIVER.** In the event that either City or Consultant shall at any time or times waive any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or any other covenant, condition or obligation. Waiver shall not be deemed effective until and unless signed by the waiving party.

15. **INCONSISTENT OR CONFLICTING TERMS IN AGREEMENT AND EXHIBITS.** In the event of any contradiction or inconsistency between any attached document(s) or exhibit(s) incorporated by reference herein and the provisions of the Agreement itself, the terms of the Agreement shall control.

Any exhibit that is attached and incorporated by reference shall be limited to the purposes for which it is attached, as specified in this Agreement. Any contractual terms or conditions contained in such exhibit imposing additional obligations on the City are not binding upon the City unless specifically agreed to in writing, and initialed by the authorized City representative, as to each additional contractual term or condition.

16. **AMBIGUITIES.** This Agreement has been negotiated at arms' length between persons knowledgeable in the matters dealt with herein. Accordingly, any rule of law, including, but not limited to, Section 1654 of the Civil Code of California, or any other statutes, legal decisions, or common-law principles of similar effect, that would require interpretation of any ambiguities in this Agreement against the party that drafted this Agreement is of no application and is hereby expressly waived.

17. **VENUE.** This Agreement and all matters relating to it shall be governed by the laws of the State of California and any action brought relating to this agreement shall be held exclusively in a state court in the County of Merced.

18. **AMENDMENT.** This Agreement shall not be amended, modified, or otherwise changed unless in writing and signed by both parties hereto.

19. **INTEGRATION.** This Agreement constitutes the entire understanding and agreement of the parties and supersedes all previous and/or contemporaneous understanding or agreement between the parties with respect to all or any part of the subject matter hereof.

20. **AUTHORITY TO EXECUTE.** The person or persons executing this Agreement on behalf of the parties hereto warrants and represents that he/she/they has/have the authority to execute this Agreement on behalf of their entity and has/have the authority to bind their party to the performance of its obligations hereunder.

21. **COUNTERPARTS.** This Agreement may be executed in one or more counterparts with each counterpart being deemed an original. No counterpart shall be deemed to be an original or presumed delivered unless and until the counterparts executed by the other parties hereto are in the physical possession of the party or parties seeking enforcement thereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the date first above written.

CITY OF MERCED
A California Charter Municipal
Corporation

BY: _____
City Manager

ATTEST:
STEVE CARRIGAN, CITY CLERK

BY: _____
Assistant/Deputy City Clerk

APPROVED AS TO FORM:

BY: Jan B. Furlant 5-14-20
City Attorney Date

ACCOUNT DATA:

BY: _____
Verified by Finance Officer

CONSULTANT
AARC Consultants, LLC
A Texas Limited Liability Company

BY: Archana K. Chainani
(Signature)

ARCHANA K. CHAINANI
(Typed Name)

Its: SHAREHOLDER
(Title)

BY: Joanna Campos
(Signature)

Joanna Campos
(Typed Name)

Its: Secretary / Treasurer
(Title)

Taxpayer I.D. No. 46-2542494

ADDRESS: P.O. Box 421168
Houston, TX 77242

TELEPHONE: (210) 444-2272

FAX: _____

E-MAIL: sthomas@aarccgroup.com

SCOPE OF WORK

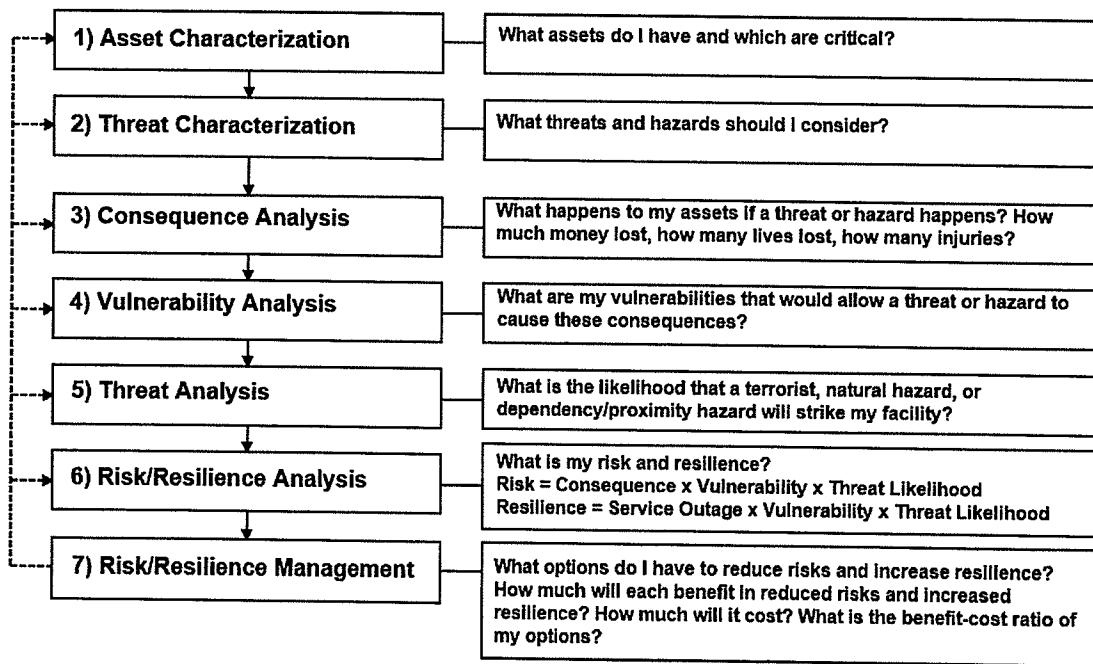
APPROACH TO PROJECT

AARC's approach for performing this work can be summarized in simple terms:

- Provide clear and consistent communication and manage the project proactively.
- Assess systemic and asset Risk & Resilience and align the findings with the Emergency Response Plan.
- Leverage innovative technology.
- Employ the AARC QA/QC process.
- Safeguard City data and critical system processes.

AARC will closely follow the ANSI/AWWA J100-10 (R13) Methodology for Risk Analysis and Management for Critical Asset Protection (RAMCAP) Standard for Risk and Resilience Management of Water and Wastewater Systems. The seven-step RAMCAP process is designed to efficiently focus in on what is most important for the utility to manage. After initial steps to understand the utilities' assets, identify those most critical, and characterize the threats faced by these most critical assets, the process undertakes a screening whereby the City and AARC will rank and screen the highest priority threat-assets pairs to focus the RRA on the most significant threat-asset combinations.

The Seven-Step RAMCAP Process



- The RAMCAP methodology was originally authored by AARC Senior Manager Dr. Jerry Brashear, and he is currently working on the update.

AARC will work with City to identify and quantify the worst reasonable consequences that can be caused by specific threats on the assets identified and carried forward for analysis. In the Vulnerability Analysis, AARC will evaluate how well each critical asset (and its protective systems) withstands each specified threat. In the Threat Analysis, AARC will perform an estimate of the likelihood (and frequency) that the hazards, whether human or natural, will occur. The Risk Analysis is performed to calculate the level of risk in clearly quantified terms where Risk = Consequences x Vulnerability x Threat Likelihood. The Resilience Analysis is performed to calculate how resilient the utility is systemically and how resilient select assets are to specified threats.

PARTICULAR ISSUES TO BE EVALUATED IN PERFORMANCE OF PROJECT

Tool Selection Options

AARC employs a number of tools for performing the RRA analysis. The AARC Team has experience with the non-proprietary, USEPA-developed Vulnerability Self-Assessment Tool (VSAT), the proprietary Program to Assist Risk and Resilience Examination (PARRE), and AARC's own Risk and Resilience Analytic Tool (RRA Tool).

VSAT Web 2.0 is an "approachable" tool designed for non-specialists. VSAT would enable City staff to perform self-evaluations to remain compliant with AWIA. However, VSAT has limitations that will be discussed with City staff.

The more sophisticated Program to Assist Risk and Resilience Examination (PARRE) is a proprietary software package with yearly fees (~\$500/user/year) and a steeper learning curve. Proprietary tools can be very powerful; however, they require ongoing investment as well as specialized knowledge to employ in managing risk and resilience.

The AARC Team developed an in-house spreadsheet tool that is more flexible, customized, and client-oriented than the standard tools above, and this option will also be discussed with the City.

The City of Merced ERP will improve document preparedness, response, and recovery actions to take during an emergency. The goal is to protect employees and the community while maintaining the expected quantity and quality of water and its treatment.

This stance will minimize disruption to the public while preserving assets and sustaining community trust. The ERP will document preparedness, response and recovery procedures used to protect against emergencies. These will be primarily managed by the City with mutual aid, including resources from other private and public agencies. Existing Emergency Response Plans and policies will be incorporated, demonstrating best practices.

TOOL SELECTION OPTIONS

- AARC Risk and Resilience Analytic Tool (RRA Tool)
- Vulnerability Self-Assessment Tool (VSAT)
- Program to Assist Risk and Resilience Examination (PARRE)

AARC developed the RRA Tool as a transparent, readily understandable and universally useable tool for assessing utility risk and weighing risk mitigation choices.

AARC is able to expand upon the capabilities of either the AARC RRA Tool, VSAT, or PARRE by including queries based on the Resilience Attributes Framework developed by AARC Principal Scientist Dr. Scott Thomas. This approach proved useful for the US Army and was featured in a recent Argonne National Laboratory report. It is easy to employ by non-specialists and therefore easy to use in RRA updates.

Upon selection of the appropriate analysis tool in coordination with the City, AARC will use the tool to identify and document threats that present the highest risks to water facilities, as well as to evaluate costs and benefits of countermeasures to reduce those risks.

DETAILED SCOPE OF WORK

Task 1 – Obtain Information and Coordination with City

AARC will request from the City the data and information necessary to perform the RRA and develop the ERP, which may include the following:

| | |
|--|--|
| Vulnerability Assessments (physical and/or cyber) | Programs/Emergency Response Contract Plans |
| Standard Operating Procedures (SOPs) | Hazard Mitigation Plans |
| Emergency Operations Plan (EOP) and/or Continuity of Operations Plans (COOP) | Emergency Operation Center Procedures and Building Evacuation and Damage Assessment Procedures |
| Dam Emergency Action Plans | Recovery Plans |
| Water Master Plans | Water Outage Emergency Drinking Water Plans |
| Capital Improvement Master Plans | Water Reliability Studies; Urban Water Management Plans |
| Financial and Administrative Policies | DHS Protected Critical Infrastructure Information Audit Reports |
| Reserve Policies | Cybersecurity Assessment of Operations Networks |
| Financial Audit Findings | Cybersecurity Assessment of SCADA Networks |
| Procurement Policies | Division of Drinking Water Emergency Notification Plan |

During this period, AARC will elicit preliminary input from the Local Emergency Planning Committee (LEPC), Local Emergency Planning Partners (LEPP), and other agencies to gain their perspective on key issues for assessment.

Based upon the data review, the Risk and Resilience Team will identify potential gaps in an all-hazards risk management and develop a Preliminary List of Critical Assets. This preliminary work will focus the field work and analysis in Task 2.

► **Deliverables:** Kickoff Meeting (agenda, meeting, and minutes); Preliminary List of Critical Assets

Task 2 – Prepare and Complete the Drinking Water System RRA and Submit the Certificate to the U.S. Environmental Protection Agency (EPA)

AARC will conduct a site visit to perform initial asset reviews, interview City staff, and conduct several workshops in support of understanding City assets and collect data required for the J100 analysis. The AARC team and City staff will discuss and confirm, by consensus, critical assets and a representative subset of assets selected for the drinking water system RRA.

The AARC Team will also lead a Threat-Asset and Consequence-Vulnerability Workshop during this period, as well as an out-brief to management to present a summary of findings from the site visit and discuss next steps.

► **An integral and differentiating feature of our approach is the utilization of the innovative *Resilience Attributes Framework* developed by AARC Principal in Charge Dr. Scott Thomas to provide additional information and rationale for recommendations to manage risk and promote general resilience for system-wide benefits.**

The RRA will address all elements required by the AWIA, including:

| | |
|---|---|
| <ul style="list-style-type: none"> • Risk to the system from malevolent acts, including physical and cyber intrusion. • Risk to the system from natural hazards. • Dependency hazards, including utility interruptions (power outages, communications outages), supply chain, employee staffing issues (illness, strike), customers, transportation, proximity, etc. • Risk to the system from unintentional human-caused risks, (hazardous chemical spills, incorrect system operation, network security gaps or failures, critical component failure) • The resilience of the SCADA system and all automated systems (including cyber security). | <ul style="list-style-type: none"> • Resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including system security). • Monitoring practices of the potable water system. • Financial infrastructure assessment. • The use, storage, or handling of various chemicals by the system. • Operation and maintenance of the systems. • Sufficiency of Monitoring practices. |
|---|---|

The AARC Team will write the Draft RRA. Progress updates will be conducted with City staff to discuss interim risk analysis results, consequence analysis, preliminary data reports, and findings and recommendations as the Draft RRA is being developed.

The Draft RRA will be transmitted securely to City for review and comment. Meetings will be conducted to present the Draft RRA and review comments. The AARC Team will prepare written responses to all reviewer comments on draft deliverables and will not incorporate our responses into the Final RRA unless the City has indicated that our response is acceptable and appropriately addresses the review comments. Hard copy and electronic versions of the Final RRA will be submitted to the City (via secure transmittal) to meet the AWIA deadline.

► **Deliverables: Threat-Asset and Consequence-Vulnerability Workshops; Draft RRA (PDF version and four (4) hard copies); Review Meeting and Presentation; Response to Comments; Final RRA (PDF version and four (4) hard copies) (No later than December 31, 2020).**

Task 3 – Prepare and submit the Emergency Response Plan

AARC will review the City's strategies and resources for emergency preparedness, response and recovery policies, plans and procedures, as well as training and exercise plans. The LEPC and the LEPPs will be briefed on releasable portions of the RRA findings and recommendations and asked for their input. Working with the City, AARC will compare benefits and costs of potential risk mitigation measures and prepare a Risk Reduction Plan for the emergency preparedness section of the ERP.

Site Visit and Interviews – AARC will conduct site visits to collect information and conduct interviews with City staff. AARC will coordinate with the City, stakeholders, and the LEPC and LEPPs to develop and update incident management processes.

Write Updated Emergency Response Plan – The ERP team will develop the Draft Updated ERP using guidance from USEPA, AWWA, and Federal Emergency Management Agency (FEMA), and data collected within Tasks 1 and 2, including incorporating the existing City ERP. The ERP will include preparedness, response and recovery policies and procedures as well as other security-related plans so that the City staff can effectively respond to natural and person-caused malevolent acts. AARC will also incorporate strategies that can be used to aid in the detection of these malevolent acts or natural hazards. Existing plans and policies will be incorporated by reference where appropriate.

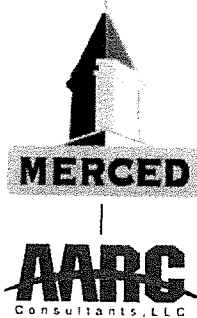
The ERP will include a description of emergency situations where the City staff will use Mutual Aid to provide support to and cooperation with other agencies (cities, county, state, federal, and private sector supporting agencies) during significant emergencies.

AARC will incorporate the findings of the RRA and recommend strategies and resources to improve the resilience of the system, including physical security and cybersecurity. Specifically, AARC will incorporate plans and procedures that can be implemented and identify equipment that can be used, as well as procedures and actions that can be taken, to lessen the impacts and mitigate the consequences of a malevolent act or natural hazard that threatens the water supply or the ability of the City to deliver safe drinking water. AARC will also incorporate strategies that can be used to aid in the detection of these malevolent acts or natural hazards. Existing plans and policies will be incorporated by reference.

City staff will review and comment on the Draft Updated ERP. A meeting will be conducted to review comments and address questions. The AARC Team will make requested changes and edits to address comments and produce the Final Updated ERP. The AARC Team will prepare written responses to all reviewer comments and will not incorporate our responses into the Final Updated ERP unless the City has indicated in writing that our response is acceptable and appropriately addresses the review comments.

► **Deliverables: Draft Updated ERP (PDF version and four (4) hard copies); Review Meeting; Response to Comments; Final ERP (PDF version and four (4) hard copies) (No later than June 30, 2021).**

Progress Payments, upon invoice, will be made monthly based on actual hours worked applied to the agreed-upon hourly rates of compensation. Consultant invoices shall identify hours worked by date for each named individual staff member, and include backup for all non-labor charges.



Scott Thomas, PhD
Principal Scientist in Charge

Jeff Cooley
Project Manager

Phase I - Conduct RRA based upon AWIA Requirements

Phase II - Prepare or Update AWIA ERP

Jerry Brashear, PhD
*Senior Manager,
Risk and Resilience Assessment*

Daniel Widger
Lead Cybersecurity Specialist

Joseph McCroy
*Assistant PM /
Senior Cybersecurity Specialist /
Senior Physical Security Specialist*

Staff Risk and Resilience Analysts

Stephen Baruch, D Env
*Lead Emergency
Response Planner*

Bob Kaminky
*Senior Emergency
Response Planner*

Staff Emergency Planners

Supporting Functions

| | | | |
|------------------------|-----------------------------|----------------------------|--|
| Project Liaison | VSAT/PARRE Analysis | Financial Risk | Technical Editor <i>David Auchter, PhD</i> |
| Administrative | Data Security System | Database Management | Graphics |



PROPOSED TIMELINE

The following suggested timeline is included as a guideline and will be adjusted in coordination with the City of Merced staff to fit City AARC requirements.

| Phase I - Risk and Resilience Assessment | | |
|--|--|---|
| Task | Milestones/Deliverables | Project Deadline |
| 1 | Initiate Project Kick-Off Meeting Data Collection and Review Preliminary List of Critical Assets | July 6 2020 July 2020 July-August 2020 August 2020 |
| 2 | Site Visits Threat-Asset and Consequence Workshop Draft Risk and Resilience Assessment Review Meeting Final Risk and Resilience Assessment Submit Certification | August 2020 August 2020 September 2020 October 2020 November 2020 No later than Dec 31, 2020 |
| Phase II - Emergency Response Plan Update | | |
| Task | Milestones/Deliverables | Project Deadline |
| 3 | Data Collection and Review Risk Reduction Plan Site Visit and Interviews Draft Emergency Response Plan Review Meeting Final Emergency Response Plan Submit Certification | November-December 2020 January 2021 January-February 2021 March 2021 March 2021 May 2021 No later than Jun 30, 2021 |

AARC Consultants Detailed Fee Proposal Calculation

\$109,775

3/12/2020

City of Merced CA Cost - AWIA RRA and ERP

| Tasks | AARC Consultants | | | | | | | | | | Subtotal | |
|--|---------------------|-----------------|------------------------------------|-----------------|---------------------------------------|----------------------------|------------------------------|------------------|--------------------|----------------|----------|-----------|
| | Principal Scientist | Project Manager | Senior Risk and Resilience Manager | Senior Engineer | Project Engineer /Analyst/Tech Editor | Lead Cybersecurity Analyst | Senior Cybersecurity Analyst | Lead ERP Planner | Senior ERP Planner | Administrative | | |
| | \$225 | \$195 | \$395 | \$190 | \$140 | \$250 | \$190 | \$190 | \$135 | \$85 | | |
| Billing Rate \$/hour | | | | | | | | | | | | |
| Task 1 Obtain Info and Coordination with City | | | | | | | | | | | | |
| Kickoff Meeting | | 8 | | | | | | | | | | \$1,560 |
| Project Management | 10 | 40 | | | | | | | | | | \$10,050 |
| Data Collection and Review | 4 | 10 | | | 16 | 2 | 12 | 4 | | | | \$8,630 |
| Preliminary List of Critical Assets | | 2 | | | | | | | | | | \$390 |
| Subtotal | 14 | 60 | 0 | 0 | 16 | 2 | 12 | 4 | 0 | 0 | 0 | \$20,630 |
| Task 2 Prepare and Complete RRA | | | | | | | | | | | | |
| Asset Inspections | | 10 | | | 10 | | | | | | | \$3,350 |
| Staff Interviews/Workshops | | 16 | | | 16 | | 12 | | | | | \$7,640 |
| J-100 Analysis | 3 | 12 | 10 | | 16 | | 4 | | | | | \$9,965 |
| Develop Draft RRA | 5 | 14 | | | 16 | | 4 | | | 8 | | \$7,535 |
| Review Meeting and Presentation | 1 | 10 | | | | | | | | | | \$2,175 |
| Review and Respond to Comments on Draft RRA | 4 | 12 | | 2 | 6 | | 4 | | | | | \$5,220 |
| Develop Final RRA | 5 | 14 | | | 12 | | 3 | | | 8 | | \$6,785 |
| Subtotal | 18 | 88 | 10 | 2 | 76 | 0 | 27 | 0 | 0 | 16 | 16 | \$42,670 |
| Task 3 Prepare and Submit ERP | | | | | | | | | | | | |
| Data Collection and Review | | 4 | | | | | | 16 | | | | \$4,900 |
| Interviews | 2 | 6 | | 8 | | | | | | 2 | | \$4,430 |
| Meetings and Planning Workshop | | 2 | | | | | | 14 | | | | \$4,940 |
| Develop Draft ERP | 4 | 8 | | | | | | 12 | 10 | | | \$5,190 |
| Review Meeting and Presentation | 1 | 2 | | | 8 | | | 30 | 12 | | | \$12,360 |
| Review and Respond to Comments on Draft ERP | 3 | 4 | | | | | | 10 | | | | \$2,515 |
| Develop Final ERP | 3 | 8 | | | 4 | | | 8 | | 8 | | \$3,785 |
| Subtotal | 13 | 46 | 0 | 8 | 20 | 0 | 0 | 110 | 58 | 18 | 18 | \$46,475 |
| Total Labor Hours / Cost: | 618 | 45 | 194 | 10 | 112 | 2 | 39 | 114 | 58 | 34 | 34 | \$109,775 |
| billing rates | \$225 | \$195 | \$395 | \$190 | \$140 | \$250 | \$190 | \$190 | \$135 | \$85 | | |
| total hours | 45 | 194 | 10 | 10 | 112 | 2 | 39 | 114 | 58 | 34 | 34 | |
| cost | \$10,125 | \$37,830 | \$3,950 | \$1,900 | \$15,680 | \$500 | \$7,410 | \$21,660 | \$7,830 | \$2,890 | \$2,890 | \$109,775 |

Assumptions:
 All expenses covered under labor rates. Will not charge for expenses separately.