

ITEM 5.3

CITY MANAGER'S REPORT JANUARY 10, 2022 CITY COUNCIL REGULAR MEETING

ITEM: **CONSIDER CREATION OF CIP PW 22-36 FOR AQUIFER STORAGE AND RECOVERY, AND APPROVAL OF AGREEMENT WITH CAROLLO ENGINEERS, INC. AND RELATED BUDGET AMENDMENT**

RECOMMENDATION: **Council to Consider the Adoption of a Resolution Approving the Creation of Capital Improvement Project (CIP) PW 22-36 for the Aquifer Storage and Recovery, and Approve Professional Services Agreement with Carollo Engineers, Inc. and Approve Related Budget Amendment**

SUMMARY:

The City's drinking water comes from two sources, local groundwater and surface water purchased from the South San Joaquin Irrigation District (SSJID). The City's water supply is reliable and staff has taken the necessary steps to plan for future growth and the corresponding water needs; however, there are some risks that are especially challenging to plan for. These risks include but are not limited to, prolonged droughts, new State regulatory requirements, emerging groundwater contaminants, and management of upstream reservoirs.

To mitigate these risks and further protect the City's water supply needs, staff is requesting that City Council consider creating a Capital Improvement Project (CIP) to evaluate the use of Aquifer Storage and Recovery (ASR). ASR is a water resources management technique for actively storing water underground during wet periods for recovery when needed. The injection and extraction of water is done using a well and is permitted through the State Water Board.

Staff is recommending that City Council approve the creation of Capital Improvement Project PW 22-36 Aquifer Storage and Recovery with an initial budget of \$350,000. In addition, staff is requesting Council approve a Professional Services Agreement with Carollo Engineers, Inc. (Carollo) in the amount of \$301,744 for completing the engineering feasibility study and preliminary design.

Project funds were not included in the adopted Fiscal Year (FY) 21/22 Budget, therefore, staff is requesting that Council approve a budget amendment allocating \$350,000 of the Water Capital Replacement Fund 5600 for the proposed project to complete the feasibility study and preliminary design.

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CONSIDER CREATION OF CIP PW 22-36 FOR AQUIFER STORAGE AND RECOVERY, AND APPROVAL OF AGREEMENT WITH CAROLLO ENGINEERS, INC. AND RELATED BUDGET AMENDMENT

BACKGROUND:

The City's drinking water comes from two sources, local groundwater and surface water purchased from the South San Joaquin Irrigation District (SSJID). The City's water supply is reliable and staff has taken the necessary steps to plan for future growth and the corresponding water needs; however, there are some risks that are especially challenging to plan for. These risks include but are not limited to, prolonged droughts, new State regulatory requirements, emerging groundwater contaminants, and management of upstream reservoirs.

To mitigate these risks and further protect the City's water supply needs, staff is requesting that City Council consider creating a Capital Improvement Project (CIP) to evaluate the use of Aquifer Storage and Recovery (ASR). ASR is a water resources management technique for actively storing water underground during wet periods for recovery when needed. The injection and extraction of water is done using a well and is permitted through the State Water Board. If approved by Council, the CIP would consist of a feasibility study, design, permitting, and construction.

At the request of staff, Carollo has provided a proposal to assist the City with completing the engineering feasibility study and preliminary design for the ASR project for a cost not to exceed \$301,744. Carollo's scope includes coordinating and oversight of drilling an ASR test hole, water quality sampling and testing, and recommendations for the ASR well design.

REASON FOR RECOMMENDATION:

Aquifer Storage and Recovery would allow for greatly improved reliability of the City's water supplies by pumping and storing surface water purchased from the South San Joaquin Irrigation District during wet seasons into the ground for subsequent recovery and use during dry seasons, times of drought, or water supply shortage. Creation of CIP PW 22-36 Aquifer Storage and Recovery, approval of the agreement with Carollo, and allocation of funds would allow staff to move forward with completion of the engineering feasibility study and preliminary project design.

FISCAL IMPACT:

Staff is requesting that City Council approve the creation of Capital Improvement Project PW 22-36 Aquifer Storage and Recovery with an initial budget of \$350,000. Sufficient funds were not included in the adopted Fiscal Year 21/22 Budget; therefore, staff is requesting that Council approve a budget amendment allocating \$350,000 of the Water Capital Replacement Fund 5600 as follows:

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Increase Transfers Out		
5600-99-00-990-90-10		\$350,000
Increase Transfers In		
5690-99-00-393-00-00	PW 22-36	\$350,000
Increase Expenditures		
5690-80-00-420-12-00	PW 22-36	\$350,000

ATTACHMENTS:

- A. Resolution Approving the Creation of Capital Improvement Project (CIP) PW 22-36 for the Aquifer Storage and Recovery, and Approve Professional Services Agreement with Carollo Engineers, Inc. and Approve Related Budget Amendment.
- B. Professional Services Agreement with Carollo Engineers, Inc. to Provide the Lathrop Aquifer Storage and Recovery Feasibility Study and Funding Support, CIP PW 22-36

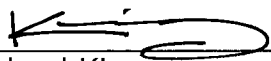
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RECOVERY, AND APPROVAL OF AGREEMENT WITH CAROLLO ENGINEERS,
INC. AND RELATED BUDGET AMENDMENT

APPROVALS:



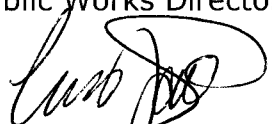
Greg Gibson
Senior Civil Engineer

12/14/2021
Date




Michael King
Public Works Director

12-14-2021
Date



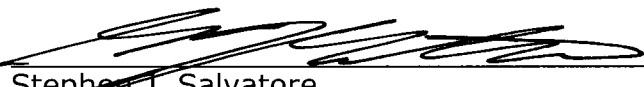
Cari James
Finance Director

12/14/2021
Date



Salvador Navarrete
City Attorney

12-14-2021
Date



Stephen J. Salvatore
City Manager

1-4-22
Date

RESOLUTION NO. 22-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LATHROP APPROVING THE CREATION OF CAPITAL IMPROVEMENT PROJECT (CIP) PW 22-36 FOR THE AQUIFER STORAGE AND RECOVERY, AND APPROVE PROFESSIONAL SERVICES AGREEMENT WITH CAROLLO ENGINEERS, INC. AND APPROVE RELATED BUDGET AMENDMENT

WHEREAS, the City's drinking water comes from two sources, local groundwater and surface water purchased from the South San Joaquin Irrigation District (SSJID). The City's water supply is reliable and staff has taken the necessary steps to plan for future growth and the corresponding water needs; and

WHEREAS, there are some risks that are especially challenging to plan for, including but are not limited to, prolonged droughts, new State regulatory requirements, emerging groundwater contaminants, and management of upstream reservoirs; and

WHEREAS, to mitigate these risks and further protect the City's water supply needs, staff is requesting that City Council consider creating a Capital Improvement Project (CIP) to evaluate the use of Aquifer Storage and Recovery (ASR); and

WHEREAS, ASR is a water resources management technique for actively storing water underground during wet periods for recovery when needed. The injection and extraction of water is done using a well and is permitted through the State Water Board; and

WHEREAS, at the request of staff, Carollo Engineers, Inc. (Carollo) has provided a proposal to assist the City with completing the engineering feasibility study and preliminary design for the ASR project for a cost not to exceed \$301,744; and

WHEREAS, staff is recommending that City Council approve the creation of CIP PW 22-36 Aquifer Storage and Recovery with an initial budget of \$350,000. In addition, staff is requesting Council approve a Professional Services Agreement with Carollo in the amount of \$301,744 for completing the engineering feasibility study and preliminary design; and

WHEREAS, project funds were not included in the adopted Fiscal Year (FY) 21/22 Budget, so therefore staff is requesting that Council approve a budget amendment allocating \$350,000 of the Water Capital Replacement Fund 5600 for the proposed project to complete the feasibility study and preliminary design.

NOW, THEREFORE, BE IT RESOLVED, the City Council of the City of Lathrop does hereby approve the creation of CIP PW 22-36 Aquifer Storage and Recovery and approval of a professional services agreement with Carollo Engineers, Inc. in the amount of \$301,744 for completion of the engineering feasibility study and preliminary design; and

NOW, THEREFORE, BE IT FURTHER RESOLVED, by the City Council of the City of Lathrop hereby approves the budget amendment to the following accounts:

Increase Transfers Out		
5600-99-00-990-90-10		\$350,000
Increase Transfers In		
5690-99-00-393-00-00	PW 22-36	\$350,000
Increase Expenditures		
5690-80-00-420-12-00	PW 22-36	\$350,000

The foregoing resolution was passed and adopted this 10th day of January 2022, by the following vote of the City Council, to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

Sonny Dhaliwal, Mayor

ATTEST:

Teresa Vargas, City Clerk

APPROVED AS TO FORM:



Salvador Navarrete, City Attorney

CITY OF LATHROP

AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES WITH CAROLLO ENGINEERS, INC.

TO PROVIDE THE LATHROP AQUIFER STORAGE AND RECOVERY FEASIBILITY STUDY AND FUNDING SUPPORT, CIP PW 22-36

THIS AGREEMENT, dated for convenience this **10th day of January, 2022**, is by and between **Carollo Engineers, Inc.**, (“CONSULTANT”) and the **City of Lathrop**, a California municipal corporation (“CITY”);

RECITALS:

WHEREAS, CONSULTANT is specially trained, experienced, and competent to perform Professional Engineering Consulting Services, which are required by this agreement; and

WHEREAS, CITY selected the CONSULTANT pursuant to said qualifications; and

WHEREAS, CONSULTANT is willing to render such Professional Engineering Consulting Services, as hereinafter defined, on the following terms and conditions; and

NOW, THEREFORE, CONSULTANT and the CITY agree as follows:

AGREEMENT

(1) Scope of Service

CONSULTANT agrees to provide the Lathrop Aquifer Storage and Recovery Feasibility Study and Funding Support, CIP PW 22-36 in accordance with the scope of work and fee proposal provided by CONSULTANT, attached hereto as Exhibit “A” and incorporated herein by reference. CONSULTANT represents it is prepared to and can diligently perform these services in accordance with the standards of its profession by exercising the skill and ability ordinarily required of engineers performing the same or similar services, under the same or similar circumstances, in the State of California, and to CITY’S satisfaction. The fee proposal shall include all reimbursable costs required for the performance of the Scope of Services. Payment of additional reimbursable costs considered to be over and above those inherent in the original Scope of Services shall be approved of in advance and in writing, by the CITY.

(2) Compensation

CITY hereby agrees to pay CONSULTANT a sum not to exceed **\$301,744.00** for the Lathrop Aquifer Storage and Recovery Feasibility Study and Funding Support, CIP PW 22-36 on a time and materials basis as set forth in Exhibit “A”. CONSULTANT shall be paid any uncontested sum due and payable within thirty (30) days of receipt of billings containing all information pursuant to Paragraph 5 below. Compensation for any task must be equal to or less than the percentage of task complete. In no event shall CONSULTANT be entitled to compensation for work not included in Exhibit “A”, unless a written change order or authorization describing the extra work and payment terms has been executed by CITY’s authorized representative prior to the commencement of the work. Payment is made based on a lump sum by task basis.

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(3) Effective Date and Term

The effective date of this Agreement is **January 10, 2022**, and it shall terminate no later than **June 30, 2023**.

(4) Independent Contractor Status

It is expressly understood and agreed by both parties that CONSULTANT, while engaged in carrying out and complying with any of the terms and conditions of this Agreement, is an independent contractor and not an employee of the CITY. As an independent contractor, CONSULTANT is responsible for controlling the means and methods to complete the scope of work described in Exhibit "A" to City's satisfaction. CONSULTANT expressly warrants not to represent, at any time or in any manner, that CONSULTANT is an employee of the CITY.

(5) Billings

CONSULTANT shall submit invoices for completed work on a monthly basis, or as otherwise agreed, providing without limitation, details as to amount of hours, individual performing said work, hourly rate, and indicating to what aspect of the Scope of Services said work is attributable. CONSULTANT'S bills shall include a list of all tasks, a total amount due, the amounts previously billed, and the net amount due on the invoice. Except as specifically authorized by CITY, CONSULTANT shall not bill CITY for duplicate services performed by more than one person. In no event shall CONSULTANT submit any billing for an amount in excess of the rates or the maximum amount of compensation provided in section (2) for either task or for the entire Agreement, unless modified by a properly executed change order.

(6) Advice and Status Reporting

CONSULTANT shall provide the CITY with timely reports, orally or in writing, of all significant developments arising during performance of its services hereunder, and shall furnish to CITY such information as is necessary to enable CITY to monitor the performance of this Agreement. CONSULTANT shall submit to CITY such reports, diagrams, drawings and other work products developed pursuant to the Scope of Services.

(7) Auditing

CITY reserves the right to periodically audit all charges made by CONSULTANT to CITY for services under this Agreement. Upon request, CONSULTANT agrees to furnish CITY, or a designated representative, with necessary information and assistance needed to conduct such an audit.

CONSULTANT agrees that CITY or its delegate will have the right to review, obtain and copy all records pertaining to performance of this Agreement. CONSULTANT agrees to provide CITY or its delegate with any relevant information requested and shall permit CITY or its delegate access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with the requirement. CONSULTANT further agrees to maintain such records for a period of three (3) years after final payment under this agreement.

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(8) Assignment of Personnel

CONSULTANT acknowledges that the CITY has relied on CONSULTANT's capabilities and on the qualifications of CONSULTANT's principals and staff as identified in its proposal to CITY. The services shall be performed by, or under the direct supervision, of CONSULTANT's Authorized Representative: **Christopher T. Cleveland, P.E., Principal-in-Charge**. CITY shall be notified by CONSULTANT of any change of its Authorized Representative, and CITY is granted the right of approval of all original, additional, and replacement personnel at CITY's sole discretion, and shall be notified by CONSULTANT of any changes of CONSULTANT's project staff prior to any change.

CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. If CITY asks CONSULTANT to remove a person assigned to the work called for under this Agreement, CONSULTANT agrees to do so immediately, without requiring the City to process a reason or explanation for its request.

(9) Assignment and Subcontracting

It is recognized by the parties hereto that a substantial inducement to CITY for entering into this Agreement was, and is, the professional reputation and competence of CONSULTANT. Neither this Agreement nor any interest therein may be assigned by CONSULTANT without the prior written approval of CITY's authorized representative. CONSULTANT shall not subcontract any portion of the performance contemplated and provided for herein, other than the subcontractors noted in the proposal, without prior written approval of the CITY'S authorized representative.

(10) Insurance

On or before beginning any of the services or work called for by any term of this Agreement, CONSULTANT, at its own cost and expense, shall carry, maintain for the duration of the Agreement, and provide proof thereof that is acceptable to the CITY the insurance specified in subsections (a) through (c) below with insurers and under forms of insurance satisfactory in all respects to the CITY. CONSULTANT shall not allow any subcontractor to commence work on any subcontract until all insurance required of the CONSULTANT has also been obtained for the subcontractor. Verification of this insurance shall be submitted and made part of this Agreement prior to execution.

- (a) Workers' Compensation. CONSULTANT shall, at CONSULTANT's sole cost and expense, maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by CONSULTANT. Said Statutory Workers' Compensation Insurance and Employer's Liability Insurance shall be provided with limits of not less than one million dollars (\$1,000,000). In the alternative, CONSULTANT may rely on a self-insurance program to meet these requirements provided that the program of self-insurance complies fully with the provisions of the California Labor Code. The insurer, if insurance is provided, or the CONSULTANT, if a program of self-insurance is provided, shall waive all rights of subrogation against the CITY for loss arising from work performed under this Agreement.

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- (b) Commercial General and Automobile Liability Insurance. CONSULTANT, at CONSULTANT's own cost and expense, shall maintain commercial general and automobile liability insurance for the period covered by this Agreement in an amount not less than two million dollars (\$2,000,000) per occurrence, combined single limit coverage for risks associated with the work contemplated by this Agreement. If Commercial General Liability Insurance or an Automobile Liability form or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. Such coverage shall include but shall not be limited to, protection against claims arising from bodily and personal injury, including death resulting therefrom, and damage to property resulting from activities contemplated under this Agreement, including the use of owned and non-owned automobiles.

Coverage shall be at least as broad as Insurance Services Office Commercial General Liability occurrence form CG 0001 (ed. 11/88) and Insurance Services Office Automobile Liability form CA 0001 (ed. 12/90) Code 1 (any auto).

Each of the following shall be included in the insurance coverage or added as an endorsement to the policy:

- (i) CITY, its officers, employees, agents, and volunteers are to be covered as insured with respect to each of the following: liability arising out of activities performed by or on behalf of CONSULTANT, including the insider's general supervision of CONSULTANT; products and completed operations of CONSULTANT; premises owned, occupied or used by CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, employees, agents, or volunteers.
 - (ii) The insurance shall cover on an occurrence or an accident basis, and not on a claim made basis.
 - (iii) An endorsement must state that coverage is primary insurance and that no other insurance affected by the CITY will be called upon to contribute to a loss under the coverage.
 - (iv) Any failure of CONSULTANT to comply with reporting provisions of the policy shall not affect coverage provided to CITY and its officers, employees, agents, and volunteers.
 - (v) Insurance is to be placed with California-admitted insurers with a Best's rating of no less than A: VII.
 - (vi) Notice of cancellation or non-renewal must be received by CITY at least thirty days prior to such change.
- (c) Professional Liability. CONSULTANT, at CONSULTANT's own cost and

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expense, shall maintain for the period covered by this Agreement professional liability insurance for licensed professionals performing work pursuant to this Agreement in an amount not less than two million dollars (\$2,000,000) per claim made and per policy aggregate covering the licensed professionals' errors and omissions, as follows:

- (i) Any deductible or self-insured retention shall not exceed \$150,000 per claim.
- (ii) Notice of cancellation, reduction in coverage, or non-renewal must be received by the CITY at least thirty days prior to such change shall be included in the coverage or added as an endorsement to the policy.
- (iii) The policy must contain a cross liability or severability of interest clause.
- (iv) The following provisions shall apply if the professional liability coverages are written on a claims made form:
 - 1. The retroactive date of the policy must be shown and must be before the date of the Agreement.
 - 2. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the Agreement or the work, so long as commercially available at reasonable rates.
 - 3. If coverage is canceled or not renewed and it is not replaced with another claims made policy form with a retroactive date that precedes the date of this Agreement, CONSULTANT must provide extended reporting coverage for a minimum of five years after completion of the Agreement or the work. The CITY shall have the right to exercise at the CONSULTANT's cost, any extended reporting provisions of the policy should the CONSULTANT cancel or not renew the coverage.
 - 4. A copy of the claim reporting requirements must be submitted to the CITY prior to the commencement of any work under this Agreement.
- (d) Deductibles and Self-Insured Retentions. CONSULTANT shall disclose the self-insured retentions and deductibles before beginning any of the services or work called for by any term of this Agreement. During the period covered by this Agreement, upon express written authorization of the CITY's authorized representative, CONSULTANT may increase such deductibles or self-insured retentions with respect to CITY, its officers, employees, agents, and volunteers. The CITY's authorized representative may condition approval of an increase in deductible or self-insured retention levels upon a requirement that CONSULTANT procure a bond guaranteeing payment of

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losses and related investigations, claim administration, and defense expenses that is satisfactory in all respects to each of them.

- (e) Notice of Reduction in Coverage. In the event that any coverage required under subsections (a), (b), or (c) of this section of the Agreement is reduced or limited, CONSULTANT shall provide written notice to CITY at CONSULTANT'S earliest possible opportunity and in no case later than five days after CONSULTANT is notified of the change in coverage.
- (f) In addition to any other remedies CITY may have if CONSULTANT fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, CITY may, at its sole option:
 - (i) Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;
 - (ii) Order CONSULTANT to stop work under this Agreement or withhold any payment which becomes due to CONSULTANT hereunder, or both stop work and withhold any payment, until CONSULTANT demonstrates compliance with the requirements hereof;
 - (iii) Terminate this Agreement.

Exercise of any of the above remedies, however, is an alternative to other remedies CITY may have and is not the exclusive remedy for CONSULTANT'S breach.

(11) Indemnification - CONSULTANT'S Responsibility

As to the CONSULTANT's work hereunder, it is understood and agreed that (a) CONSULTANT has the professional skills necessary to perform the work, (b) CITY relies upon the professional skills of CONSULTANT to perform the work in a skillful and professional manner, and (c) CONSULTANT thus agrees to so perform.

Acceptance by CITY of the work performed under this Agreement does not operate as a release of said CONSULTANT from such professional responsibility for the work performed.

It is further understood and agreed that CONSULTANT is apprised of the scope of the work to be performed under this Agreement and CONSULTANT agrees that said work can and shall be performed in a fully competent manner in accordance with the standard of care applicable to CONSULTANT'S profession.

CONSULTANT shall indemnify, defend, and hold CITY, its officers, employees, agents, and volunteers harmless from and against any and all liability, claims, suits, actions, damages, and causes of action arising out of any personal injury, bodily injury, loss of life, or damage to property, or any violation of any federal, state, or municipal law or ordinance, to the extent caused by the willful misconduct or negligent acts or omissions of CONSULTANT, its employees, subcontractors, or agents, or on account of the performance or character of this work, except for any such claim arising out of the negligence or willful misconduct of the CITY, its officers, employees, agents, or volunteers. It is understood that the duty of

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CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. Acceptance 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 apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault.

CONSULTANT shall not be responsible for warranties, guarantees, fitness for a particular purpose, breach of fiduciary duty, loss of anticipated profits for economic, incidental, liquidated, or consequential damages to CITY or any third party arising out of breach of contract, delay, termination, or for professional negligence. Additionally, CONSULTANT shall not be responsible for acts and decisions of third parties, including governmental agencies, other than CONSULTANT's sub-consultants, that impact project completion and/or success.

(12) Licenses

If a license of any kind, which term is intended to include evidence of registration, is required of CONSULTANT, its employees, agents, or subcontractors by federal or state law, CONSULTANT warrants that such license has been obtained, is valid and in good standing, and CONSULTANT shall keep it in effect at all times during the term of this Agreement, and that any applicable bond has been posted in accordance with all applicable laws and regulations.

(13) Business Licenses

CONSULTANT shall obtain and maintain a CITY of Lathrop Business License until all Agreement services are rendered and accepted by the CITY.

(14) Termination

Either CITY or CONSULTANT may cancel this Agreement upon 30 days written notification to the other party. Upon termination, or completion of services under this Agreement, all information collected, work product and documents shall be delivered by CONSULTANT to CITY within ten (10) calendar days.

(15) Funding

CONSULTANT agrees and understands that renewal of this agreement in subsequent years is contingent upon action by the City Council consistent with the appropriations limits of Article XIII (B) of the California Constitution and that the Council may determine not to fund this agreement in subsequent years.

(16) Notices

All contracts, appointments, approvals, authorizations, claims, demands, Change Orders, consents, designations, notices, offers, requests and statements given by either party to the other shall be in writing and shall be sufficiently given and served upon the other party if (1) personally served, (2) sent by the United States mail, postage prepaid, (3) sent by private

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express delivery service, or (4) in the case of a facsimile transmission, if sent to the telephone FAX number set forth below during regular business hours of the receiving party and followed with two (2) Days by delivery of a hard copy of the material sent by facsimile transmission. Personal service shall include, without limitation, service by delivery and service by facsimile transmission.

To City: City of Lathrop
City Clerk
390 Towne Centre
Lathrop, CA 95330

Copy to: City of Lathrop
Department of Public Works
390 Towne Centre
Lathrop, CA 95330

Main: (209) 941-7430
Fax: (209) 941-7449

To Consultant: Carollo Engineers, Inc.
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833
Phone: (916) 565-4888
Fax: (916) 565-4880

(17) CITY-Provided Information and Services

CITY shall furnish CONSULTANT available studies, reports and other data pertinent to CONSULTANT's services; obtain or authorize CONSULTANT to obtain or provide additional reports and data as required; furnish to CONSULTANT services of others required for the performance of CONSULTANT's services hereunder, and CONSULTANT shall be entitled to use and reasonably rely upon such information and services provided by CITY and others in performing CONSULTANT's services under this Agreement.

(18) Estimates and Projections

CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, the schedule of others, over the incoming water quality and/or quantity, or over the way CITY's plant(s) and/or associated processes are operated and/or maintained. Data projections and estimates are based on CONSULTANT's opinion based on experience and judgement. CONSULTANT cannot and does not guarantee that actual schedules, costs and/or quantities realized will not vary from the data projections and estimates prepared by CONSULTANT and CONSULTANT will not be liable to and/or indemnify CITY and/or any third party in the future, except to the extent such inconsistencies are caused by CONSULTANT's negligent performance hereunder.

(19) Access

CITY shall arrange for access to and make all provisions for CONSULTANT to enter upon public and private property as required for CONSULTANT to perform services hereunder.

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(20) Miscellaneous

- (a) Consent. Whenever in this Agreement the approval or consent of a party is required, such approval or consent shall be in writing and shall be executed by a person having the express authority to grant such approval or consent.
- (b) Contract Terms Prevail. All exhibits and this Agreement are intended to be construed as a single document. Should any inconsistency occur between the specific terms of this Agreement and attached exhibits, the terms of this Agreement shall prevail.
- (c) Controlling Law. The parties agree that this Agreement shall be governed and construed by and in accordance with the Laws of the State of California.
- (d) Definitions. The definitions and terms are as defined in these specifications.
- (e) Force Majeure. Neither party shall be deemed to be in default on account of any delay or failure to perform its obligations under this Agreement, which directly results from an Act of God or an act of a superior governmental authority.
- (f) Headings. The paragraph headings are not a part of this Agreement and shall have no effect upon the construction or interpretation of any part of this Agreement.
- (g) Incorporation of Documents. All documents constituting the Agreement documents described in Section 1 hereof and all documents which may, from time to time, be referred to in any duly executed amendment hereto are by such reference incorporated in the Agreement and shall be deemed to be part of this Agreement.
- (h) Integration. This Agreement and any amendments hereto between the parties constitute the entire Agreement between the parties concerning the Project and Work, and there are no other prior oral or written agreements between the parties that are not incorporated in this Agreement.
- (i) Modification of Agreement. This Agreement shall not be modified or be binding upon the parties unless such modification is agreed to in writing and signed by the parties.
- (j) Ownership of Documents. All documents, photographs, reports, analyses, audits, computer media, or other material documents or data, and working papers, whether or not in final form, which have been obtained or prepared under this Agreement, shall be deemed the property of the CITY. Upon CITY's request, CONSULTANT shall allow CITY to inspect all such documents during the CONSULTANT's regular business hours. Documents, including drawings and specifications, prepared by CONSULTANT pursuant to this Agreement are not intended or represented to be suitable for reuse by CITY or others for this Project or on any other project. Any reuse of completed documents or use of partially completed documents without written verification or concurrence by CONSULTANT for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to CONSULTANT.
- (k) Provision. Any agreement, covenant, condition, clause, qualification, restriction, reservation, term or other stipulation in the Agreement shall define or otherwise control, establish or limit the performance required or permitted or to be required of or permitted by either party. All provisions, whether covenants or conditions, shall be deemed to be both covenants and conditions.

CITY OF LATHROP – LATHROP AQUIFER STORAGE AND RECOVERY FEASIBILITY STUDY AND FUNDING SUPPORT, CIP PW 22-36

- (l) Severability. The invalidity in whole or part of any provision of this Agreement shall not void or affect the validity of any other provision of this agreement. If a court of competent jurisdiction finds or rules that any provision of this Agreement is void or unenforceable, the provisions of this Agreement not so affected shall remain in full force and effect.
- (m) Status of CONSULTANT. In the exercise of rights and obligations under this Agreement, CONSULTANT acts as an independent contractor and not as an agent or employee of CITY. CONSULTANT shall not be entitled to any rights and benefits accorded or accruing to the City Council members, officers or employees of CITY, and CONSULTANT expressly waives any and all claims to such right and benefits.
- (n) Successors and Assigns. The provisions of this Agreement shall inure to the benefit of, and shall apply to and bind, the successors and assigns of the parties.
- (o) Time of the Essence. Time is of the essence of this Agreement and each of its provisions. In the calculation of time hereunder, the time in which an act is to be performed shall be computed by excluding the first Day and including the last. If the time in which an act is to be performed falls on a Saturday, Sunday or any Day observed as a legal holiday by CITY, the time for performance shall be extended to the following Business Day.
- (p) Venue. In the event that suit is brought by either party hereunder, the parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of San Joaquin or in the United States District Court for the Eastern District of California.
- (q) Recovery of Costs. The prevailing party in any action brought to enforce the terms of this Agreement or arising out of this Agreement may recover its reasonable costs, including reasonable attorney's fees, incurred or expended in connection with such action against the non-prevailing party.
- (r) The services to be performed by CONSULTANT are intended solely for the benefit of CITY. No person or entity not a signatory to this Agreement shall be entitled to rely on CONSULTANT's performance of its services hereunder, and no right to assert a claim against CONSULTANT by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of CONSULTANT's services hereunder.

(21) Notice to Proceed

Prior to commencing work under this agreement, CONSULTANT shall receive a written "Notice to Proceed" from CITY. A Notice to Proceed shall not be issued until all necessary bonds and insurances have been received. City shall not be obligated to pay CONSULTANT for any services prior to issuance of the Notice to Proceed.

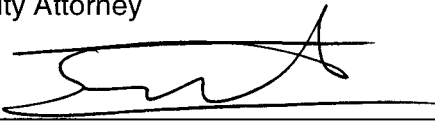
(22) Signatures

The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the CITY. This agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

CITY OF LATHROP – LATHROP AQUIFER STORAGE AND RECOVERY FEASIBILITY STUDY AND FUNDING SUPPORT, CIP PW 22-36

Approved as to Form:

City of Lathrop
City Attorney



Salvador Navarrete

12-14-2021

Date

Recommended for Approval:

City of Lathrop
Public Works Director

Michael King

Date

Approved by:

City of Lathrop
390 Towne Centre Drive
Lathrop, CA 95330

Stephen J. Salvatore

Date

City Manager

Consultant:

Carollo Engineers, Inc.
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833

Fed ID # 86-0899222
Business License # 20758

Signature

Date

Print Name and Title

October 15, 2021

Mr. Greg Gibson, P.E.
City of Lathrop
390 Towne Centre Drive
Lathrop, CA 95330

Subject: Lathrop Aquifer Storage and Recovery Test Well and Feasibility Study Proposal

Dear Greg:

Carollo Engineers is currently under contract to prepare a water supply alternatives study to evaluate options for PFAS treatment and the potential implementation of aquifer storage and recovery wells to increase the City's water supply reliability.

The water supply alternatives project started in July 2021 and we have completed the PFAS sampling efforts and anticipate data being available by the end of September. In late August, the City identified a potential funding source through the Hazard Mitigation Assistance (HMA) Building Resilient Infrastructure and Communities (BRIC) program administered through the Federal Emergency Management Agency (FEMA). The City asked Carollo to help prepare the Notice of Interest (NOI) for this grant using some of the funds originally set aside as part of the water supply alternatives study.

The NOI has been submitted and subsequently the City decided not to pursue the grant funding. However, the City did decide to move ahead with the first phase of its ASR Project and requested the attached scope and fee for an ASR test well and feasibility analysis.

We estimate approximately \$44,000 of budget will be available under the current contract at the end of October. With these remaining funds we will complete the following tasks in the original scope of work:

- Subtask 2.3 – Preparation of the PFAS well sampling report
- Subtask 3.1 – Development of the PFAS feasibility analysis for the LAWTF
- Subtask 3.2 – Acquisition of existing ASR and hydrogeological information/data
- Task 4 – Development of the PFAS technical memorandum

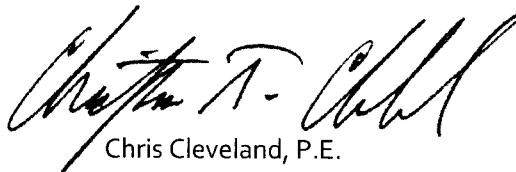
All ASR test well and feasibility study efforts will be conducted under a new contract, as detailed in the attached scope and fee. We look forward to continuing to work with the City on these exciting projects. Please do not hesitate to reach out to either of us with any questions.

Sincerely,

CAROLLO ENGINEERS, INC.



Christina Romano, P.E., PMP
Vice President



Chris Cleveland, P.E.
Senior Vice President

Attachments: Proposed Project Scope of Work

**CITY OF LATHROP
AQUIFER STORAGE AND RECOVERY PROJECT FEASIBILITY STUDY AND TEST WELL**

SCOPE OF WORK SUMMARY

October 15, 2021

BACKGROUND INFORMATION

The Carollo Engineers team (Carollo) is currently working with the City of Lathrop (City) to investigate water supply alternatives to meet long-term water supply reliability and resiliency goals including:

1. Evaluating treatment of an existing well (Well 9) at a centralized treatment location (LAWTF) for identified contaminant(s) including waste disposal concepts.
2. Evaluating aquifer storage and recovery (ASR) well, injecting SSJID water, possibly during winter months when adequate surface water is available.

We have kicked off the water supply alternatives project and worked with the City to sample existing wells and gather additional groundwater quality information. The City has decided to move the ASR Project forward under a dedicated CIP project, and requested this separate scope of services for installation of a test well and ASR feasibility analysis.

APPROACH AND SCOPE OF SERVICES

Task 1 – Project Management

The purpose of this task is to provide ongoing project coordination, management, and review of deliverables. The Carollo team will prepare for and conduct a 1-hour virtual project kick-off meeting to discuss updated objectives for this project, focused on ASR project goals and objectives and confirming the City selected ASR well site based on currently known information on regional geology and the City's water conveyance infrastructure.

Deliverables:

- Kickoff meeting agenda and meeting summary
- Monthly invoices

Task 2 – Aquifer Storage and Recovery Test Well and Feasibility Study

As part of our existing water supply alternatives effort, we will support the City in connecting with the City of Tracy to obtain existing ASR and hydrogeological information. We will use information collected under the existing contract in conjunction with test well data to support the development of an ASR Feasibility Analysis, as outlined below.

Task 2.1 – ASR Test Well Installation and Water Quality Analysis

We will coordinate and oversee exploratory test hole drilling at the proposed site for well design purposes. Based on previous hydrogeologic assessments by our team and experience in the area, we have budgeted this phase of work using an exploratory target depth of 700 feet. At this depth, we anticipate being able to assess site conditions to the extent necessary to meet project objectives. The drilling work will be performed by a licensed and qualified well driller under subcontract to our team. A well drilling permit will be secured by the driller. A geophysical survey conducted in the exploratory test hole will be used to delineate completion intervals for the prospective ASR well. Formation samples from the test hole will be used as a basis for design of a gravel pack to satisfy the appropriate sand control requirements for a municipal well station. In addition, up to three additional soil samples will be collected and submitted for mineralogy analysis including x-ray diffraction, x-ray fluorescence, cation exchange capacity, acid insoluble residue analysis, thin section petrographic analysis and scanning electron microscopy evaluations. The test hole will be converted to a monitoring well that will be used to measure water levels, conduct short-term aquifer testing and collect water samples. In addition, the monitoring well can serve as an observation well, to assess production well efficiency and final acceptance of the constructed well.

The monitoring well design will comply with all state and local well standards. The monitoring well may include up to two piezometers depending on the lithology encountered. Upon completion of the monitoring well construction and development, we will provide a sampling rig to obtain water samples from each monitoring well piezometer. We will submit collected water samples to a State certified laboratory for preliminary water quality screening. The screening will encompass DDW initial source water quality monitoring requirements for primary and secondary constituents, volatile organic chemicals, selected synthetic organic chemicals, and selected unregulated chemicals.

At the completion of exploratory drilling, monitoring well construction, and water quality testing we will prepare a status memorandum summarizing results and recommendations for final well design. The report will delineate recommended completion intervals that appear most favorable in meeting project objectives. The status memorandum will be utilized to support additional tasks related to the ASR Feasibility Analysis.

Deliverables:

- Summary report on test hole exploratory activities including recommendations for future ASR well design, estimates of yield, and water quality for a production well.
- Lithologic log, geophysical log, monitoring well as-built profile, sieve analysis, soil and water quality analysis results reports, and a well design engineering worksheet.

Task 2.2 – ASR Well Feasibility Analysis

Under this task the team will analyze the feasibility of ASR to support a groundwater banking program to enhance the conjunctive management of surface water and groundwater resources for the City of Lathrop. Conceptually, the groundwater banking program would involve the diversion and transmission of surplus SSJID water for storage in the aquifer(s) beneath the City of Lathrop. This analysis will be based on existing information and readily available data.

Under this task the team will do the following:

- Review existing data
- Evaluate and rank ASR objectives

- Summarize water supplies and variability, as well as water demands and variability, and water quality and variability
- Determine storage volume requirements to meet stated goals and objectives
- Discuss known or potential issues based on local experience
- Identify hydrogeologic considerations
- Evaluate ASR feasibility at a client-selected location
- Develop preliminary cost estimate and implementation schedule
- Outline regulatory, legal, environmental and non-technical considerations
- Provide conclusions and recommendations.

Task 2.3 – ASR Conceptual Design

Based on the analysis performed under Task 2.2, we will develop a conceptual design for an ASR well at the City-selected site, initially identified as near the River Islands development near the SSJID L2 turnout. The team will prepare a conceptual drawing for the site layout, as well as lifecycle costs for the project. We will evaluate the City’s existing water distribution system to determine system tie-in requirements. We will also develop a work plan for next steps including a timeline for overall project implementation.

Task 2.4 – ASR Feasibility Study Report

We will compile the information developed under Tasks 2.1, 2.2, and 2.3 in an ASR Feasibility Analysis report which will include the following sections:

- Introduction
- ASR Objectives
- Water supply, water demand, and water quality
- Disinfection of the Recharge Water
- Hydrogeology
- Storage Zone and Well Site Selection
- Conceptual Design of ASR and Monitoring Wells
- Preliminary Baseline and Cycle Testing Program
- ASR Economics
- Legal and Regulatory Issues
- Recommendations and Timeline

A draft report will be prepared for City review. We will hold a comment review workshop after receipt of City comments and then develop the final report.

Deliverables:

- Draft ASR Feasibility Study
- Final ASR Feasibility Study

Assumptions:

- Water supply, demand, and quality data will be based on existing information in the City’s Urban Water Management Plan (UWMP).
- No groundwater modeling will be performed.

- City review period is assumed to be two weeks.
- City comments will be consolidated into a single document.

SCHEDULE ESTIMATE

The schedule for the ASR Feasibility Study is dependent on when Notice to Proceed is given, mobilization time for a driller, and receipt of information from the City and the City of Tracy. Once the driller has mobilized, we will prepare a schedule for completion of the report with assumptions for data receipt.

BUDGET ESTIMATE

Monthly invoices will be submitted to the City. Costs will be billed on a percent complete basis with a not to exceed lump sum contract value of \$301,744. A detailed budget table is provided in the attachment.

CITY OF LATHROP
AQUIFER STORAGE AND RECOVERY TEST WELL AND FEASIBILITY STUDY
FEE PROPOSAL

10/15/2021

TASK	CAROLLO ENGINEERS, INC.						PECE ¹ \$13 \$13.00	SUBCONSULTANTS		Subtotals	COST SUMMARY		
	Project Manager \$322	SME/ QA/QC \$322	Project Engineer \$236	CAD Tech \$146	Doc Process \$129	Hours		Budget	ASRS		LSCE	Total ODCs	Total Cost
						Hours		Budget					
						Hours		Budget					
TASK 1 - PROJECT MANAGEMENT													
1.1 Project Administration	8	4	0	0	4	16	\$4,380	\$208	\$0	\$0	\$0	\$208	\$4,588
1.2 Kickoff Meeting	2	2	2	0	2	8	\$2,018	\$104	\$0	\$0	\$0	\$104	\$2,122
Task 1 Total Hours	10	6	2	0	6	24							
Task 1 Total Budget	\$3,220	\$1,932	\$472	\$0	\$774		\$6,398	\$312	\$0	\$0	\$0	\$312	\$6,710
TASK 2 - AQUIFER STORAGE AND RECOVERY PROJECT FEASIBILITY STUDY													
2.1 ASR Test Well and Water Quality Analysis	4	4	0	0	0	8	\$2,576	\$104	\$0	\$194,900	\$214,390	\$225,214	\$227,790
2.2 ASR Well Feasibility Analysis	2	2	0	0	0	4	\$1,288	\$52	\$20,000		\$22,000	\$23,152	\$24,440
2.3 ASR Conceptual Design	4	4	16	8	0	32	\$7,520	\$416	\$5,000		\$5,500	\$6,191	\$13,711
2.4 ASR Feasibility Study Report	8	4	24	4	8	48	\$11,144	\$624	\$15,000		\$16,500	\$17,949	\$29,093
Task 2 Total Hours	14	10	40	12	8	84							
Task 2 Total Budget	\$4,508	\$3,220	\$9,440	\$1,752	\$1,032		\$22,528	\$1,196	\$40,000	\$194,900	\$258,390	\$272,506	\$295,034
Total	24	16	42	12	14	108	\$28,926	\$1,508	\$40,000	\$194,900	\$258,390	\$272,818	\$301,744

Notes:

¹ Project Equipment and Communication Expense