



City of Santa Barbara  
Public Works Department

***Memorandum***

**DATE:** January 20, 2022

**TO:** Water Commission

**VIA:** Joshua Haggmark, Water Resources Manager

**FROM:** Dakota Corey, Water Supply Analyst

**SUBJECT:** Recycled Water Market Assessment

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In June 2021, supported by a unanimous recommendation from the Water Commission, City Council adopted an Enhanced Urban Water Management Plan (EUWMP). The EUWMP serves as the City's primary water supply planning and management tool, with a planning horizon to 2050. An important policy recommendation from the Enhanced UWMP was to update the City's 2009 Recycled Water Expansion Assessment and perform a cost-benefit analysis to identify opportunities for increased recycled water consumption. Recycled water is an environmentally-responsible, drought-proof supply that offsets potable water use, and the City wishes to maximize the use of its current recycled water system to the extent it is cost-effective.

**BACKGROUND**

The El Estero Water Resources Center (El Estero WRC) has a design capacity to treat 11 million gallons of wastewater per day (MGD) with an average flow of 6 MGD, including 2.5 MGD of tertiary filtration and disinfection to produce non-potable recycled water. The City initiated planning for a recycled water project in the early 1980s. Phase I was completed in 1989. It included a tertiary treatment plant with traditional media filtration, a 600,000-gallon distribution reservoir and pumping station, and 5.1 miles of distribution main. Phase II was completed in 1992, which added an additional pumping station, a 1.5-million-gallon reservoir at the Santa Barbara Municipal Golf Course, and 8.3 miles of distribution main. In 2015, the City completed upgrades to its tertiary treatment plant that replaced the media filtration with membrane ultrafiltration, which provided a higher quality recycled water.

The total current recycled water system capacity is 2.5 MGD, which equates to approximately 3,000 AFY; however, irrigation demands in the spring, fall, and winter are much lower than peak summer demands, effectively making the system capacity 1,400 AFY. The City currently uses roughly 1,000 acre feet per year (AFY) of recycled water for non-potable uses, representing about 9% of the City's total water production, leaving approximately 400 AFY available for new recycled water customers. Of the 1,000 AFY,



roughly 230 AFY is used as process wastewater within the El Estero WRC, and the balance (770 AFY) is distributed to roughly 95 customers within the recycled water system's service area. Customers served by the recycled water system include parks, schools, golf courses, sections of the Highway 101 median, and other large landscapes. A limited number of public restrooms have been retrofitted to use recycled water for toilet flushing.

In 2009, the City conducted a Recycled Water Expansion Assessment, which included a detailed evaluation of the feasibility of increasing recycled water consumption. Over 400 AFY of potential demand from 56 potential customer sites was identified using water use records from 2006 to 2008. Nine projects were identified that could deliver up to 320 AFY to roughly 43 customers for irrigation, toilet flushing, and commercial laundries. Of these customers, the City has connected seven of the nine, increasing recycled water demands by approximately 102 AFY. In February 2021, City Council approved a recycled water agreement with La Cumbre Mutual Water Company, agreeing to sell them up to 100 AFY of recycled water annually, leaving approximately 200 AFY of potential recycled water for new irrigation demand. Additional recycled water is potentially available for customer needs outside of peak summer demands, if such demands could be identified.

The new study will consider current recycled water production capacity, updated customer demand information, and system connection costs. Furthermore, the study needs to evaluate the cost-effectiveness of serving new recycled water customers with the understanding that potable reuse may become a viable new supply for the City in the next 15 years, which would supplant recycled water.

In 2017, the City completed a Potable Reuse Feasibility Study, which included an analysis of raw water augmentation. Raw water augmentation was selected for incorporation into the EUWMP as the City's most feasible potable reuse option. If the City were to implement raw water augmentation, a large portion of the current recycled water distribution system would be re-purposed to transport advanced treated water up to the City's Cater Water Treatment Plant (Cater WTP) for additional treatment. All, or a portion of the City's recycled water system would be eliminated with recycled water customers becoming potable water customers. Thus, the lifespan of the City's current non-potable recycled water system may only be 15 years, which is shorter than many typical projects.

### Consultant Selection Process

In October 2021, staff released a Request for Proposals for the Recycled Water Market Assessment (RW Assessment). Carollo Engineers, Inc. (Carollo) and Water Systems Consulting, Inc. each submitted proposals for the project through the competitive bidding process. Upon reviewing the firms' proposals and checking references, the evaluation committee selected Carollo as being best suited to prepare the RW Assessment. Carollo has years of experience evaluating recycled water opportunities, detailed understanding of the City's recycled water system and potential future potable reuse plans, and has successfully performed similar work for other water agencies.



## Recycled Water Market Assessment Scope of Work

Carollo's detailed scope of work for the RW Assessment is included in the project contract, which is attached to this memo. In summary, they will complete the following evaluations/analysis:

1. Evaluate the City's non-potable recycled water demand and system: Estimate volume of water available for new customers by evaluating current and future recycled water demand.
2. New recycled water demand analysis: Identify new potential recycled water customers by evaluating existing commercial and irrigation potable customer demands (recycled water regulations prohibit its use by single-family residences so single-family residential data will not be evaluated.); locate customers geospatially to identify feasible system alignments/expansions. City staff have also identified several interested potential customers for this portion of the analysis, including Peabody Charter School, East Beach Townhomes, Hyatt, Clark Estate, Alameda Park, Alice Keck Park, and the Courthouse.
3. Cost effective analysis: Evaluate customer and City costs of connection, including any capital costs. Any customers who can be added for less than the cost of desalination or imported water will be considered cost effective.
4. Consideration of future potable reuse: Evaluate life cycle costs for three potable reuse implementation alternatives.
5. Uncertainty analysis: Qualitative sensitivity analyses to identify future uncertainty associated with key planning issues.

While the amount of recycled water available during peak summer months is somewhat limited, the City wishes to maximize the benefit of this important water resource. The RW Assessment will allow the City to identify any new customers who can cost-effectively be connected to the City's recycled water system.

## **RECOMMENDATION**

At the December Water Commission meeting the Commission recommended Council authorize this agreement with Carollo Engineering, Inc. in the amount of \$61,200 to prepare the Recycled Water Market Assessment. Since two of the five Commissioners were unable to attend the December Water Commission meeting, this item was requested to be brought back for additional input and discussion on the scope. The current contract does include a 10% contingency for additional scope.

**ATTACHMENT:** Recycled Water Market Assessment Contract with Carollo Engineers, Inc.



**SANTA BARBARA CITY AGREEMENT NO. \_\_\_\_\_**

**with**

**Carollo Engineers, Inc. for Recycled Water Market Assessment**

This contract is entered into on \_\_\_\_\_ by and between:

**The City of Santa Barbara**, a Municipal Corporation, referred to herein as the "City,"

and,

**Carollo Engineers, Inc.**, a California corporation, referred to herein as the "**Consultant**,"

This contract includes the following attached exhibits:

- Exhibit A – scope of services; personnel; rates and schedule of payments; time and schedule of performance;
- Exhibit B – Insurance Requirements;

**1. CONTRACT ADMINISTRATION**

a. The City's Public Works Director ("Department Head") is the City's authorized representative for administration of this contract. The Department Head may delegate administrative responsibilities under this contract. References in this contract to Department Head include references to a person exercising authority delegated by the Department Head.

b. Inge Wiersema, ("Project Manager") is the Consultant's representative for administration of this contract. The Project Manager is also the professional responsible to provide the services under this contract except as otherwise expressly stated in Exhibit A. Consultant may not change the Project Manager without the written consent of the Department Head, which consent may be withheld at the discretion of the Department Head. An unauthorized substitution of the Project Manager is a material breach of this contract.

**2. SCOPE OF CONSULTANT SERVICES**

a. Consultant agrees to provide professional services to the City for the development of a Recycled Water Market Assessment as described in scope of services included in the attached Exhibit A.

b. Consultant's services shall be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of Consultant's profession currently practicing under similar conditions and with all applicable federal, state, and local laws relating to this scope of work. Delivery of work by Consultant includes Consultant's affirmative representation that the work conforms to the requirements of this contract, all applicable federal, state and local laws, and the professional standard of care and skill applicable to the scope of services.

c. Consultant's responsibilities under this section may not be delegated or assigned. Consultant is responsible to the City for acts, errors, or omissions of Consultant's subcontractors.

d. Whenever the scope of services requires or permits review, approval, conditional approval or disapproval by the City, it is understood that such review, approval, conditional approval or disapproval is solely for the purposes of administering this contract and determining whether the Consultant is entitled to payment for work performed, and will not be construed as a waiver of any breach or acceptance by the City of any responsibility, professional or otherwise, for the work, and



will not relieve the Consultant of responsibility for complying with the professional standard of care, or laws, regulations, industry standards, or from liability for damages caused by negligent acts, errors, omissions, noncompliance with industry standards, or the willful misconduct of Consultant.

e. Consultant is an independent contractor. Neither Consultant nor any of Consultant's officers, employees, agents or subcontractors, if any, is an employee of the City by virtue of this contract or performance of any work under this contract. Consultant retains the right to pay and supervise its employees and subcontractors as it sees fit. The City has no right to supervise Consultant's employees or subcontractors. If any issues arise with Consultant's employees or subcontractors as to their performance, the City may contact the Consultant directly so that Consultant may address any issues.

### 3. COMPENSATION

a. This contract provides the exclusive means of payment for services and reimbursement for costs to Consultant. The payment for services includes all expenses incurred in the performance of this contract, including materials, travel, lodging, overhead, and similar costs, unless expense reimbursement is expressly authorized in Exhibit A. The maximum payment to Consultant under this contract, including compensation for services and reimbursement of authorized expenses, will not exceed the sum of \$61,200 unless an amendment to this contract has been approved by the City.

b. Payment for services performed will be at the hourly rates stated in the rates and payment schedule included in Exhibit A. Changes in personnel or hourly rates stated in Exhibit A may be made only after written notice to and written approval by the Public Works Director. Automatic increases to hourly rates are not permitted.

c. Consultant may be reimbursed for actual and necessary costs, without markup, as specified in Exhibit A. Where travel costs are included in Exhibit A, reimbursement will be made for actual travel costs (at fare, rate per mile or lump sum approved), and actual expenses consistent with guidelines approved by the City Finance Director for travel by City employees. Work performed by authorized subcontractors will be billed as reimbursable costs, subject to a mark-up not to exceed ten percent, according to the subcontractor's scope of work and payment contained in Exhibit A.

d. Consultant will be paid as promptly as City's fiscal procedures will permit upon receipt by the Department Head of itemized invoices. Itemized invoices must state the number of hours work performed by task, the person performing the work, the hourly rate for that person, and an itemized list of costs for which reimbursement is sought. If the Department Head has established a standard billing format, then invoices must be submitted in the standard billing format established by the Department Head. Consultant must keep records concerning payment items on a generally recognized accounting basis and maintain the records for three years following the Completion Date. Consultant must make records available for copying, inspection or audit by City employees or independent agents upon reasonable notice during reasonable business hours.

e. Consultant will submit invoices on a monthly basis unless otherwise authorized in writing by the Department Head.

f. If this contract exceeds \$10,000, the performance and payments under it, and the parties to it may be subject to examination and audit by the California State Auditor pursuant to California Government Code § 8546.7 for three years following final payment under the contract.

### 4. TIME OF BEGINNING AND COMPLETION

a. Consultant will complete all services by December 31, 2022, ("Completion Date"). Time is of the essence in the performance of this contract. Consultant will adhere to the performance schedule shown in Exhibit A, or otherwise established by the Department Head.

b. If the performance schedule calls for the services to be performed in phases or discrete increments, Consultant shall not proceed from one phase or increment to the next without written authorization from the Department Head.



c. City may withhold payments if work is not performed in accordance with the performance schedule. Consultant's failure to perform in accordance with the performance schedule, or complete the scope of services within the time specified, due to avoidable delays, may at the City's discretion be considered a material breach of this contract. Consultant shall review the remaining work and schedule of performance at least monthly and shall confirm that completion may be expected within the schedule approved, or in the alternative, give immediate notice when it shall first appear that the approved schedule will not be sufficient, together with an explanation for any projected delays in the schedule. No extension of time to complete any portion of the services called for in the contract will be allowed except upon the written approval of the Department Head.

d. If Consultant is unable to meet the Completion Date or performance schedule due to circumstances beyond Consultant's reasonable control, such as war, riots, natural disaster, epidemic, strikes, lockouts, work slow-down or stoppage, except strikes, lockouts, or work slow-down or stoppage of Consultant's employees or subcontractors, Consultant may request an extension of time. The request must be made within a reasonable time and must state the duration and justification for the delay. The Department Head will not unreasonably withhold consent to a schedule change.

## 5. CHANGES IN SCOPE OF WORK

No payment for changed or additional work will be made unless the changed or additional work has first been approved in writing by the Department Head and the parties have agreed upon the appropriate adjustment, if any, to the payment schedule and maximum payment amount for the changed or additional work. The Department Head may order changes or additions to the scope of work. Whether a change or addition to the scope of work is proposed by the Consultant or ordered by the Department Head, the parties will negotiate an appropriate adjustment, if any, to the payment schedule and maximum payment for the changed or additional work. An approved change or addition, along with the payment adjustment, if any, will be effective upon execution of a change order signed by the Consultant and the Department Head. Changes in work that increase the amount of payment are subject to approval in accordance with the City's municipal code.

## 6. OWNERSHIP OF DOCUMENTS

All documents, computer programs, plans, renderings, charts, designs, drafts, surveys and other intellectual property which is originally developed by Consultant pursuant to this contract shall become the property of City upon payment to Consultant for the services performed. Consultant will take such steps as are necessary to perfect or to protect the ownership interest of the City in such property. Consultant may retain copies of said documents for Consultant's file. Consultant agrees that all copyrights which arise from creation of the work pursuant to this contract shall be vested in the City and waives and relinquishes all claims to copyright or other intellectual property rights in favor of the City. City acknowledges that its use of the work product is limited to the purposes contemplated by the scope of work and that the Consultant makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the scope of work.

## 7. ASSIGNMENT OF CONTRACT

Consultant shall not assign, sublet or transfer any right, privilege or interest in this contract, or any part thereof, without prior written consent of City. Consultant shall not substitute personnel designated in the proposal of Consultant without the written consent of City.

## 8. NOTICES

a. When notice is required by law to be delivered by personal delivery or by mail, notices to either party may be provided by personal delivery or by depositing them in the United



States mail, first class postage prepaid, and addressed as identified at the signature page of this contract. A party may change mailing address for all purposes under this contract, by written notice.

b. Reference in this contract to a writing includes paper documents and documents in an electronic format. Writings may be delivered via delivery of an original or duplicate in person or by mail, or in an electronic format, including transmission by electronic mail, secure Internet drop-box, facsimile, or similar other standard interchange format capable of reproduction and storage, as agreed to by the Department Head and Project Manager. This paragraph does not apply to deliverables identified in Exhibit A, such as drawing, plans, maps, photographs, which must be delivered in the manner specified in Exhibit A.

## 9. DEFENSE, INDEMNITY AND HOLD HARMLESS

a. To the fullest extent permitted by law, the Consultant will defend and indemnify the City, and its council, officers, and employees from and against all liabilities regardless of nature or type that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant or Consultant's officers, employees, agents, or subcontractors. Liabilities subject to the duties to defend and indemnify include, without limitation all claims, losses, damages, penalties, fines, and judgments; associated investigation and administrative expenses; defense costs, including but not limited to reasonable attorneys' fees; court costs; and costs of alternative dispute resolution. The Consultant's obligation to indemnify applies unless it is adjudicated that its liability was caused by the active negligence or willful misconduct of an indemnified party. If it is finally adjudicated that liability is caused by the active negligence or willful misconduct of an indemnified party, the Consultant's indemnification obligation shall be reduced in proportion to the established comparative liability of the indemnified party.

b. The Consultant will defend the City and its council, officers, and employees, immediately upon tender to the Consultant of the claim in any form or at any stage of an action or proceeding, whether or not liability is established. The defense obligation includes an obligation to provide independent defense counsel approved by the City if the Consultant asserts that liability is caused in whole or in part by the negligence or willful misconduct of an indemnified party.

c. The direction, review, acceptance, or approval of the Consultant's work or work product by any indemnified party shall not affect, relieve or reduce the Consultant's indemnification or defense obligations.

d. This Section survives completion of the services or the termination of this contract. The provisions of this Section are not limited by and do not affect the provisions of this contract relating to insurance.

## 10. INSURANCE REQUIREMENTS

a. Consultant will provide insurance as specified in Exhibit B.

b. Consultant will immediately report (as soon as feasible, but not more than 24 hours) to the City's Risk Manager any accident or other occurrence causing injury to persons or property during the performance of this contract. If required by the City's Risk Manager, the report will be made in writing and shall include, at a minimum: (a) the names, addresses, and telephone numbers of the persons involved, (b) the names, addresses and telephone numbers of any known witnesses, (c) the date, time and description of the accident or other occurrence.

## 11. TERMINATION

a. The City may terminate or abandon any portion or all of the work by giving ten days written notice to Consultant. Upon receipt of a notice of termination, Consultant shall perform no further work except as specified in the notice. Before the date of termination, Consultant shall deliver to City all work product, whether completed or not, as of the date of termination and not otherwise previously delivered. The City will pay Consultant for services performed in accordance with this contract before the date of termination. If this contract provides for payment of a lump sum



for all services or by task and termination occurs before completion of the work or any defined task which according to the performance schedule was commenced before the notice of termination, the fee for services performed shall be based on an amount mutually agreed to by the City and Consultant for the portion of work completed in conformance with this contract before the date of termination. In addition, the City will reimburse Consultant for authorized expenses incurred and not previously reimbursed. The City will not be liable for any fees or costs associated for the termination or abandonment except for the fees, and reimbursement of authorized expenses, payable pursuant to this section.

b. Consultant, if Consultant is not in default or breach, may terminate Consultant's obligation to provide further services under this contract upon thirty (30) days' written notice only in the event of a material default by the City, which default has not been cured within thirty days following the written notice to the City of the default.

## 12. RIGHT TO PERFORM SIMILAR SERVICES

Nothing in this contract shall restrict the City from providing the same or similar services through City employees, other contractors, other resources, or by arrangements with other agencies. Consultant may engage in similar activities to the extent that such work does not conflict with the proper performance of services under this contract.

## 13. CONFLICT OF INTERESTS

a. Consultant warrants by execution of this contract that no person or selling agent has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage or contingent fee, and that Consultant maintains no agreement, employment, or position which would be in conflict with the duties to be performed for City under this contract. Consultant further agrees that during the term of this contract, Consultant will not obtain, engage in, or undertake any interests, obligations or duty that would be in conflict with, or interfere with, the services or duties to be performed under the provisions of this contract.

b. Consultant will not make or participate in making or in any way attempt to use Consultant's position to influence a governmental decision in which Consultant knows or has reason to know Consultant has a direct or indirect financial interest other than the compensation promised by this contract. Consultant will not have such interest during the term of this contract. Consultant will immediately advise the City if Consultant learns of such a financial interest of Consultant's during the term of this contract. If Consultant's participation in another City project would create an actual or potential conflict of interest, in the opinion of the City, the City may disqualify Consultant from participation in such other project.

## 14. ADMINISTRATION OF EMPLOYMENT

Consultant shall obtain and administer the employment of personnel having the background, training, experience, licenses and registration necessary for the work assigned, including all coordination, the withholding of proper taxes and benefits, the payment of wages, employer's contributions for FICA, and Federal and State unemployment payments, and the review and maintenance of any necessary licenses, certificates, memberships and other qualifications necessary for the services to be provided. Consultant is an independent contractor and shall not be considered an agent or employee of the City for any purpose. Consultant and its employees and agents are not entitled to any of the benefits or privileges that the City provides its employees.



## 15. BUSINESS TAX CERTIFICATE

Not later than 10 days after execution of the contract, Professional must obtain a business tax certificate from the City at Professional's expense. Professional must maintain a business tax certificate as required by the City Finance Director during the term of this contract. Payment under this contract may be withheld for violation of this section.

## 16. NO WAIVER OF PROVISIONS

No waiver of a breach of any provision of this contract shall be construed to be a continuing waiver of that provision, nor a waiver of any breach of another provision of this contract.

## 17. APPLICABLE LAWS, PARTIAL INVALIDITY

This contract shall be subject to the Santa Barbara City Charter, and the laws, rules, regulations and ordinances in effect within the City of Santa Barbara, County of Santa Barbara, California, and any interpretation of the law that may be necessary shall be pursuant to the laws applicable within that jurisdiction. If any provision of this contract is determined to be invalid, illegal or unenforceable for any reason, that provision shall be deleted from this contract and such deletion shall in no way affect, impair, or invalidate any other provision of this contract, unless it was material to the consideration for the performance required. If a provision is deleted which is not material to such consideration, the remaining provisions shall be given the force and effect originally intended.

## 18. NON-DISCRIMINATION ORDINANCE

Consultant shall perform all work pursuant to this contract in compliance with Santa Barbara Municipal Code § 9.126.020, which is an indispensable and integral provision of this contract pursuant to Santa Barbara Municipal Code § 9.126.010.

## 19. CONSULTANT EMPLOYEES AND SUBCONTRACTORS

a. Consultant will perform the work personally or through Consultant's employees, except as otherwise specifically stated in Exhibit A. If subcontracting of work is permitted, Consultant shall pay subcontractor within ten days of receipt of payment by City for work performed by a subcontractor and billed by the Consultant. Use of the term subcontractor in any other provision of this contract shall not be construed to imply authorization for Consultant to use subcontractors for performance of any service under this contract.

b. The City is an intended beneficiary of any work performed by a subcontractor for purposes of establishing a duty of care between the subcontractor and the City.

## 20. WORKPLACE CONDUCT

Consultant and Consultant's officers, employees, agents and subcontractors, while on City property or interacting with City officers, employees, contractors, or agents, will comply with the City's policies, rules, and regulations governing work place safety, conduct, and behavior, including without limitation policies prohibiting discrimination or sexual harassment. City will provide Consultant a copy of the applicable policies.

## 21. PROTECTION OF CITY INFORMATION

Consultant will treat all information obtained from the City in the performance of this contract as confidential and proprietary to the City. Consultant shall treat all records and work product prepared or maintained by Consultant in the performance of this contract as confidential. Consultant will not use any information obtained as a consequence of the performance of work for any purpose



other than fulfillment of Consultant's scope of work. Consultant will not disclose any information prepared for the City, or obtained from the City, or obtained as a consequence of the performance of work, to any person other than the City, or its own employees, agents or subcontractors who have a need for the information for the performance of work under this contract unless such disclosure is specifically authorized in writing by the City. Consultant will immediately advise the City of any request for disclosure of information or of any actual or potential unauthorized disclosure of confidential or personal information. Consultant will identify reasonably foreseeable internal and external risks to the privacy and security of personal information that could result in the unauthorized disclosure, misuse, alteration, destruction or other compromise of the information. Consultant shall regularly assess the sufficiency of any safeguards and information security awareness training in place to control reasonably foreseeable internal and external risks, and evaluate and adjust those safeguards in light of the assessment. Consultant will promptly comply with any written instructions by the City to provide any public records of the City required to be disclosed by the City pursuant to a request made pursuant to the California Public Records Act. Consultant's obligations under this paragraph shall survive the termination of this contract.

## 22. NONAPPROPRIATIONS OF FUNDS

Notwithstanding any other provision of this contract, in the event that no funds or insufficient funds are appropriated or budgeted by the City, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this contract, then City will notify Consultant of such occurrence and City may terminate or suspend this contract in whole or in part, with or without a prior notice period. Subsequent to termination of this contract under this provision, City shall have no obligation to make payments with regard to the remainder of the term.

## 23. EXECUTION

This contract may be executed in any number of original counterparts. The contract will be effective when all parties have executed the same counterpart, or each party has executed separate counterparts and has delivered a copy of the signature page of the counterpart to the other party. Upon execution by all of the parties, the counterparts shall constitute one and the same contract. Counterparts or signature pages may be delivered via delivery of an original or duplicate in person or by mail, or a duplicate, including scanned copy, in an electronic format, including transmission by electronic mail, secure Internet drop-box, facsimile, or similar other standard interchange format capable of reproduction and storage.

## 25. VENUE – CHOICE OF LAWS

This contract and disputes arising out of or relating to it or the parties' relationship are governed by the laws of the State of California. Any action or proceeding arising out of or relating to the contract or the parties' relationship must be brought in a state court situated in the County of Santa Barbara, State of California or a federal court in the district that includes the County of Santa Barbara.



IN WITNESS WHEREOF, the parties have executed this contract as of the date and year first written above.

CITY OF SANTA BARBARA, a municipal corporation      Carollo Engineers, Inc.

By: \_\_\_\_\_  
Clifford M. Maurer  
Public Works Director

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Type or Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
City                                      State                                      Zip

\_\_\_\_\_  
Telephone Number

APPROVED AS TO FORM:

Ariel Pierre Calonne, City Attorney

By: \_\_\_\_\_  
Daniel S. Hentschke  
Assistant City Attorney



DRAFT

EXHIBIT A

**Scope of Services and Personnel**



DRAFT

TAB E // APPROACH, SCHEDULE, AND PROJECT WORK PLAN

## Detailed Scope of Work

The detailed scope of work provided below reflects the task breakdown and work effort described in the Request for Proposal dated 10/7/2021. We have elaborated this scope with our assumptions and proposed approach and methods. We welcome the opportunity to discuss and revise this scope to best meet the City's needs.

### PROJECT WORK PLAN

#### Task 1 Project Management



##### Task 1.1 Project Administration

Carollo will coordinate and manage the project, including internal project meetings with City staff at key milestones. Upon commencement of the project, Carollo will prepare and maintain a detailed project schedule. It is anticipated that the project shall be completed within six months from the project start date. This task also includes the preparation of monthly invoices.

##### Task 1.2 Project Meetings

This task includes a kickoff meeting and up to five additional progress meetings that will occur approximately monthly but will be scheduled around key project milestones. It is assumed that all meetings will take place virtually using MS Teams or similar platform.

##### Task 1 Deliverables:

- Project schedule with updates, as-needed.
- Monthly invoices (6).
- Meeting agendas and summaries (6).

#### Task 2 Evaluation of City's Non-Potable Recycled Water Demand and System



##### Task 2.1 Existing Recycled Water System and Data Review

Carollo will evaluate the City's current non-potable recycled water demand and historical non-potable recycled water use. Carollo will define average and peak demands for the

system going forward, including the new irrigation uses by La Cumbre Mutual Water Company. Carollo will estimate available recycled water for new customers. It is assumed that the City will provide monthly recycled water customer consumption data for at least five full calendar years (2017-2021) in a spreadsheet format to analyze changes in seasonal demand fluctuations and remove any anomalies.

As part of this task, the Carollo Team will review the following references regarding the existing recycled water system and previous plans for expansion:

- 2020 Enhanced Urban Water Management Plan (WSC, 2020).
- 2017 Potable Reuse Feasibility Study (Carollo, 2017).
- 2014 Recycled Water Hydraulic Modeling and Calibration Report (Carollo, 2014).
- 2011 Long Term Water Supply Plan (Santa Barbara, 2011).
- 2009 Recycled Water Expansion Assessment (from 2009 Water Supply Planning Study).

##### Task 2.2 New Recycled Water Demand Analysis

Carollo will identify potential new recycled water customers and evaluate the cost-effectiveness of increasing non-potable recycled water consumption in the City to the maximum extent possible. It is assumed that the City will provide at least three years of monthly potable water billing data for all City-served water accounts for the following bill codes/customer categories: single-family residential, multi-family residential with number of housing units served, commercial, industrial, and dedicated landscape meters. For the landscape irrigation, billing data should also include APN numbers, physical address locations, square footage of the irrigated landscape areas for the dedicated landscape accounts. The existing and proposed federal and State regulatory requirements governing existing and future



DRAFT

TAB E // APPROACH, SCHEDULE, AND PROJECT WORK PLAN

use and application of non-potable recycled water will be considered.

Carollo will analyze the potable billing records, screen potential customers with a potable demand of at least 10 acre-feet per year and apply industry standard ratios of indoor/outdoor demand to estimate the potential recycled water demands. The potential recycled water customer will then be geocoded using the APN information and further screened based on proximity to the existing recycled water system network. A GIS map will be prepared and the customers with potential demands will be tabulated for discussion with City staff at one of the progress meetings. A final list of potential customers will then be prepared for consideration of recycled water system expansions. A table will be prepared that summarizes the recycled water customers with their usage types, estimated average annual, maximum monthly, and peak hour demands.

### Task 2.3 Cost-Effectiveness Analysis

As part of this task, Carollo will analyze the cost-effectiveness of expanding the use of recycled water for non-potable reuse (NPR), consisting of outdoor irrigation. The City's cost for connecting/converting new recycled water customers, any capital costs associated with new recycled water storage and distribution system expansion (if required), and the customer cost of conversion to recycled water to ensure potable water separation will be included in the analysis. For budgeting purposes, it is assumed that up to five system expansion alternatives will be evaluated. Considering expansion of the treatment plant is not part of this evaluation. A life cycle cost analysis will be prepared for each alternative to determine the unit recycled water costs in \$/acre-foot for new (clusters) of potential recycled water customers. The depreciation period (range) for this analysis will be discussed with City staff. For example, a depreciation period range of 15-30 years could be used, consistent with the consideration of future potable reuse in Task 2.4. Expansion to customers that can be added for equal or less than the projected cost of imported water or desalinated water in the same depreciation period will be considered cost-effective. Carollo will tabulate the potential new customers, along with their projected recycled water use. It is assumed that the City will provide current recycled water customer connection costs as well as annual recycled water system operations and maintenance costs.

### Task 2.4 Consideration of Future Potable Reuse

Carollo will build upon the findings of the City's 2017 Potable Reuse Feasibility Study to explore the opportunities for future potable reuse considering future regulations and the possible expansion of NPR demands evaluated

in Task 2.3. Based on the findings of the 2017 Potable Reuse Feasibility Study, it is assumed that indirect potable reuse (IPR) will not be considered. Therefore, this analysis will consider the proposed use of the City's recycled water distribution system for raw water augmentation by expanding the existing recycled water distribution system. Consistent with the 2017 Potable Reuse Study, it is assumed that the City's reuse distribution system expansion will consist of a new pipeline and pump station to deliver advanced treated water via the existing NPR network from the storage tank at the Golf Course to Lauro Reservoir, which serves as a forebay to the City's Cater Water Treatment Plant (WTP) where the advanced treated wastewater would blend with surface water. The re-use augmented water in the Lauro Reservoir would then be retreated before entering the City's potable water distribution system and the South Coast Conduit. Carollo will evaluate and compare the life cycle costs for up to three alternatives to implement this raw water augmentation concept.

Because regulations involving potable reuse are incomplete or to some degree, still in development, there appears to be uncertainty about the ability to serve NPR demands from the same pipeline used to convey advanced treated water to its raw water augmentation delivery point. It is possible that back flow prevention devices would be required, similar to how irrigation systems are served from potable water systems. The three alternatives examples listed above will be refined with input from City staff and then evaluated with and without the cost of installing new backflow preventers at all NPR customer connections.

The timeline for possibly implementing potable reuse in the City is a minimum of 15 to 20 years in the future. The depreciation period used in this task will be consistent with Task 2.3.

### Task 2.5 Evaluate Uncertainty

Carollo will perform qualitative sensitivity analyses to identify future uncertainty associated with key planning issues affecting recycled water supply and demand. The relative uncertainty and the potential impact of the following factors on the City's recycled water system (expansion) will be described and summarized:

- Climate change impacting coasting flooding due to sea level rise; summer demands due to increasing temperatures; and imported water supply availability due to drought.
- Environmental impacts for the construction of new pipelines to Lauro Canyon reservoir and the new AWTF



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TABLE // APPROACH, SCHEDULE, AND PROJECT WORK PLAN

at the Corporation Yard, as well as additional brine discharge from the advanced water treatment process.

- Future growth impacting additional wastewater flows, recycled water supply availability, and future water conservation measures impacting recycled water supply demand.
- Future regulations impacting treatment requirements for raw water augmentation, as well as, conveyance and customer connection requirements when combining delivery of recycled water for NPR and raw water augmentation
- Potential changes to the cost of imported or desalinated water supply impacting the relative cost-effectiveness of expanding the recycled water system

Climate change and environmental impacts will be determined using the City's existing GIS data that includes "risk" layers associated with areas affected by sea level rise, biological resources, archaeological sites, cultural resources, geologic hazards and the presence of contaminated soils. Areas associated with new demands and new infrastructure will be overlain with this map to determine which (future) customers may be impacted by these risks.

It is assumed that this is qualitative, non-numerical, assessment using a graphic low/medium/high rating format (such as Harvey balls) to summarize the relative sensitivity of these uncertainties.

#### Task 2.6 Hydraulic Model Update (Optional)

As part of this optional task, Carollo will utilize the City's existing hydraulic model to analyze and size expansions to the existing recycled water system for new NPR customers, as well as the conveyance to Lauro Reservoir. Because Carollo calibrated this hydraulic model in 2014, and only very minor system changes have been implemented since, a new model calibration is not part of this task but could be added upon request. Carollo will request and review operational records and update any facility controls to mimic current operations and update existing NPR demands using the information tabulated as part of Task 2.2.

To support the work of Task 2.3, the existing hydraulic model will be used to optimize the sizing of possible expansion pipelines to potential new recycled water customers, rather than using standard pipeline sizes and/or simple design velocity calculations. Similarly, the recycled water model will be also used to size the new pipeline and pump station to deliver advanced treated water via the existing recycled water system from the storage tank

at the Golf Course to Lauro Reservoir. Once the model expansions are made, Carollo will conduct up to ten (10) extra model runs to analyze system pressures, velocities, and storage needs under a variety of system configurations and demand conditions.

#### Task 2 Deliverables:

- Summary table of existing recycled water customers and demands.
- Summary table of potential recycled water customers and demands.
- GIS Map(s) of potential recycled water customers and system expansions.
- Summary table of recycled water system expansion cost-effectiveness analysis for NPR.
- Summary table of unit-cost analysis of recycled water system expansion for Potable Reuse.
- Summary of sensitivity analysis of future uncertainties.
- Updated hydraulic model (Optional Task 2.6 only).

#### Task 3 Prepare and Present Report

Carollo will gather all information developed from Task 2 and prepare a succinct Recycled Water Market Assessment Report that compiles the Task 2 deliverables. Carollo will prepare a complete Administrative Draft for staff review. It is assumed that staff will complete their review in 20 working days. Following review of the Administrative Draft, Carollo will incorporate comments and provide a complete Public Draft, which will also be reviewed by the City's Water Commission. It is assumed that 20 working days will be needed to complete the review and that the Water Commission comments will be minor in nature and not exceed four hours to incorporate. Carollo will support City staff to present the results of the Administrative Draft Report at one (1) Water Commission meeting. Carollo will incorporate all comments, to be provided in one consolidated electronic copy using track changes in Word and prepare a Final Recycled Water Market Assessment Report. All versions of the report will be provided to the City in digital format only (PDF and Word).



#### Task 3 Deliverables:

- Administrative Draft Report.
- Public Draft Report.
- Final Report.
- Presentation for Water Commission Meeting.



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# Cost Proposal

TABLE F // COST PROPOSAL

## FEE ESTIMATE Recycled Water Market Assessment City of Santa Barbara



Task Description	Hours by Classification								Labor Cost	PECE	Subs and Other Direct Expenses <sup>(1)</sup>	Estimated Fee
	Senior Professional	Senior Professional	Senior Professional	Professional	Project Professional	Professional	Technician	Word Processing	Total Hours			
Task 1 - Project Management	2	0	12	0	6	0	0	0	0	\$ 5,600	\$ -	\$ -
Task 1.1 - Project Administration	1	0	6	0	3	0	0	0	0	\$ 2,800	\$ -	\$ 2,800
Task 1.2 - Project Meetings	1	0	6	0	3	0	0	0	0	\$ 2,800	\$ -	\$ 2,800
Task 2 - Evaluation of City's Non-Portable Recycled Water Demand and Supply	6	8	14	52	52	16	8	0	160	\$ 35,200	\$ 2,028	\$ 2,100
Task 2.1 - Existing Recycled Water System and Data Review	0	0	2	16	8	0	4	0	8	\$ 1,700	\$ 104	\$ 100
Task 2.2 - New Recycled Water Demand Analysis	0	0	0	16	8	0	4	0	30	\$ 6,200	\$ 380	\$ 400
Task 2.3 - Cost Effectiveness Analysis (NPV)	2	0	4	32	24	0	4	0	66	\$ 14,400	\$ 858	\$ 900
Task 2.4 - Consideration of Future Potable Reuse	2	8	4	0	0	16	0	0	30	\$ 7,400	\$ 380	\$ 400
Task 2.5 - Evaluate Uncertainty	2	0	4	16	16	0	0	0	22	\$ 5,600	\$ 285	\$ 300
Task 3 - Prepare and Present Report	4	4	14	4	32	4	4	8	74	\$ 17,200	\$ 942	\$ 1,000
Task 3.1 - Prepare and Present Report	4	4	14	4	32	4	4	8	74	\$ 17,200	\$ 942	\$ 1,000
Total (Base Scope)	12	12	40	56	90	20	12	8	230	\$ 58,100	\$ 2,990	\$ 3,100
Task 2.6 - Hydraulic Modeling (OPTIONAL)	2	0	4	24	24	0	0	0	86	\$ 17,100	\$ 1,118	\$ 1,100
Total (with Optional Task)	12	12	42	56	114	20	12	8	316	\$ 75,200	\$ 4,108	\$ 4,200
Total (with Optional Task)	12	12	42	56	114	20	12	8	316	\$ 75,200	\$ 4,108	\$ 4,200

Notes:  
(1) Other direct expenses include mileage traveling to/from meetings at IRS Federal Rate, reproduction at cost plus 5%, and Project Equipment and Communication Expense billed at \$15.00 per hour.  
(2) Subcontractor costs include 5% markup  
(3) Rates are based on 2021 billing rates



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**CAROLLO ENGINEERS, INC  
FEE SCHEDULE**

**As of January 1, 2021  
California**

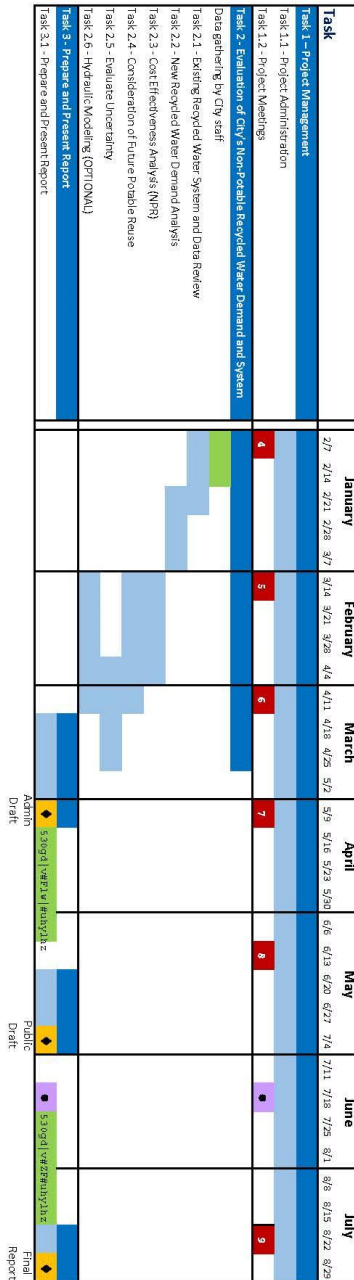
	<u>Hourly Rate</u>
<b>Engineers/Scientists</b>	
Assistant Professional	\$175.00
Professional	\$198.00
Project Professional	\$236.00
Lead Project Professional	\$295.00
Senior Professional	\$301.00
<b>Technicians</b>	
Technicians	\$146.00
Senior Technicians	\$207.00
<b>Support Staff</b>	
Document Processing / Clerical	\$110.00
<b>Project Equipment Communication Expense (PECE) Per DL Hour</b>	<b>\$13.00</b>
<b>Other Direct Expenses</b>	
Travel and Subsistence	At cost
Mileage	\$0.56/mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.



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## Recycled Water Market Assessment Schedule



SB RW Market Assessment Schedule.xlsx  
Carollo Engineers, Inc.

12/21/2021



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TAB C // KEY PERSONNEL

## Key Personnel

The most important element in any project is the people selected to perform the work. Carollo brings a small but experienced team that is the right fit to prepare the recycled water market assessment for you in an efficient manner.

### THE RIGHT TEAM FOR SANTA BARBARA

The commitment, availability, and expertise of your consultant team will determine the success of any project.

Recognizing this, we have assembled a project team that delivers a combination of past experience working with Santa Barbara and new team members that bring a fresh perspective. Our team specifically brings extensive experience working with Santa Barbara on many preceding recycled water studies with team members like Tom, Inge, and Ryan. In addition, Andy Salvesson and Brynne Weeks bring the latest and greatest knowledge on the development of potable reuse. This combination of experience is delivered in a small lean team whose dedication you can count on through successful project completion.

We have assigned Carollo's local resources to assemble the right team of individuals with specialized expertise in recycled water feasibility analysis, including non-potable reuse, indirect potable reuse, and potable reuse. Our team will provide you with a technically sound and comprehensive solutions to guide future investments and optimize the use of this local resource.

Led by project manager Inge Wiersema, our project team has been assembled and will operate based on a simple but powerful principle—put the most qualified people in the roles essential to meeting project goals. Inge brings effective and proactive project management skills, a focus on client services, and extensive relevant experience managing projects of similar complexity and scope.

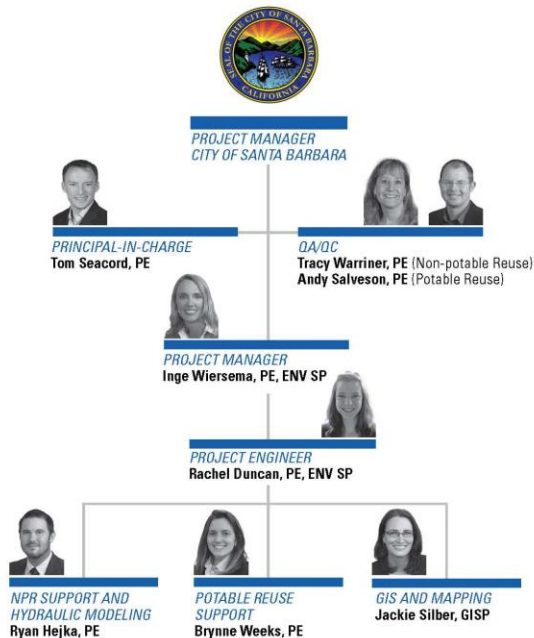
On the following pages we summarize our team's qualifications and experience. Resumes are provided in an appendix.

**CAROLLO COMMITS THE PROJECT TEAM MEMBERS PROPOSED ARE AVAILABLE FOR 120 DAYS FROM THE PROPOSAL DUE DATE. NO "BAIT AND SWITCH" — THE TEAM YOU SEE IN THE ORGANIZATIONAL CHART WILL BE THE TEAM YOU WORK WITH.**

### TEAM EXPERIENCE

Tom Seacord and Inge Wiersema will lead the project team and have demonstrated their quality of service through completing previous projects with the City. Our team brings decades of experience working closely with each other and various agencies on challenging projects. This team has proven our ability to effectively work together and stands ready to complete the City's reuse market assessment.

The organization chart illustrates how our team is structured to meet the needs of your project, based on the scope items defined in your RFP. All of our team members will be committed to the project throughout its duration.



CITY OF SANTA BARBARA // RFP NO. 4052 // RECYCLED WATER MARKET ASSESSMENT



## EXHIBIT B

### Insurance Requirements

As part of the consideration of this contract, Consultant agrees to purchase and maintain at its sole cost and expense during the life of this agreement, and for five years thereafter, insurance coverage against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

#### MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

- A. **Commercial General Liability (CGL)**: Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations with limits of no less than One Million Dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If a general aggregate limit applies, either the aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.
- B. **Automobile Liability**: Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), or if Consultant has no owned autos, Code 8 (hired) and Code 9 (non-owned), with limits of no less than One Million Dollars (\$1,000,000) per accident for bodily injury and property damage.
- C. **Workers' Compensation**: In accordance with the provisions of the California Labor Code, Consultant is required to be insured against liability for Workers' Compensation or to undertake self-insurance. Statutory Workers' Compensation and Employers' Liability of at least \$1,000,000 shall cover all Consultant's staff while performing any work incidental to the performance of this agreement.
- D. **Professional Liability**: Professional Liability (Errors and Omission) Insurance appropriate to the Consultant's profession, with limit no less than One Million Dollars (\$1,000,000) per occurrence or claim and Two Million Dollars (\$2,000,000) aggregate to cover all services rendered by the Consultant pursuant to this contract.

If the Consultant maintains higher coverage limits than the amounts shown above, then the City requires and shall be entitled to coverage for the higher coverage limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

#### OTHER INSURANCE PROVISIONS

Each insurance policy shall contain, or be endorsed to contain, the following five (5) provisions:

##### 1. **Additional Insured Status**

The City of Santa Barbara, its officers, employees, and agents, shall be covered as additional insureds on the Commercial General Liability and the Automobile Liability policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Consultant. Additional Insured coverage shall be provided in the form of an endorsement to the Consultant's insurance (at least as broad as Insurance Services Office Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used). A copy of the



endorsement evidencing that the City of Santa Barbara has been added as an additional insured on the policy, must be attached to the certificate of insurance.

**2. Subcontractors**

Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that the City is an additional insured on insurance required from subcontractors. For Commercial General Liability coverage subcontractors shall provide coverage with a format at least as broad as Insurance Services Office form CG 20 38 04 13.

**3. Notice of Cancellation**

A provision that coverage will not be cancelled or subject to reduction without written notice given to the City Clerk, addressed to P.O. Box 1990, Santa Barbara, California 93102-1990.

**4. Primary Coverage**

For any claims related to this contract, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

**5. Waiver of Subrogation**

Consultant hereby agrees to waive rights of subrogation which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agents and subcontractors.

**ACCEPTABILITY OF INSURERS**

All insurance coverage shall be placed with insurers that have a current rating from AM Best of no less than A: VII; and are admitted insurance companies in the State of California. All other insurers require prior approval of the City.

**CLAIMS MADE POLICIES**

If the required Professional Liability (Errors and Omissions) policy provides coverage on a claims-made basis:

1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.

2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Consultant must



purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

## **COVERAGE LIMITS SPECIFICATIONS**

Approval of the insurance by City or acceptance of the certificate of insurance by City shall not relieve or decrease the extent to which the Consultant may be held responsible for payment of damages resulting from Consultant's services or operation pursuant to this contract, nor shall it be deemed a waiver of City's rights to insurance coverage hereunder.

If, for any reason, Consultant fails to maintain insurance coverage which is required pursuant to this contract, the same shall be deemed a material breach of contract. City, at its sole option, may terminate this contract and obtain damages from the Consultant resulting from said breach. Alternately, City may purchase such required insurance coverage, and without further notice to Consultant, City may deduct from sums due to Consultant any premium costs advanced by City for such insurance.

## **SELF-INSURED RETENTIONS**

Any self-insured retentions must be declared to and approved by the City. At the option of the City, either: the Consultant shall cause the insurer to reduce or eliminate such self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

## **EVIDENCE OF COVERAGE**

Consultant must provide evidence that it has secured the required insurance coverage before execution of this agreement. A Certificate of Insurance supplied by the City or the appropriate ACORD and Insurance Services Office forms evidencing the above shall be completed by Consultant's insurer or its agent and submitted to the City prior to execution of this contract by the City.

Consultant shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.



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## CERTIFICATE OF LIABILITY INSURANCE

7/4/2022

DATE (MM/DD/YYYY)  
12/20/2021

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

**IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).**

<b>PRODUCER</b> Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000	<b>CONTACT NAME:</b> <b>PHONE (A/C, No, Ext):</b> <b>FAX (A/C, No):</b> <b>E-MAIL ADDRESS:</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A : Zurich American Insurance Company</td> <td>16535</td> </tr> <tr> <td>INSURER B : Continental Casualty Company</td> <td>20443</td> </tr> <tr> <td>INSURER C :</td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Zurich American Insurance Company	16535	INSURER B : Continental Casualty Company	20443	INSURER C :		INSURER D :		INSURER E :		INSURER F :	
INSURER(S) AFFORDING COVERAGE	NAIC #														
INSURER A : Zurich American Insurance Company	16535														
INSURER B : Continental Casualty Company	20443														
INSURER C :															
INSURER D :															
INSURER E :															
INSURER F :															
<b>INSURED</b> 1472602 CAROLLO ENGINEERS, INC. 2795 MITCHELL DR. WALNUT CREEK CA 94598-1601															

**COVERAGES**      **CERTIFICATE NUMBER:** 18106236      **REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INBR LTR	TYPE OF INSURANCE	ADDITIONAL INSURED	SUBROGATION	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	Y	N	GLO 9730569	7/4/2021	7/4/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	N	BAP 9730571	7/4/2021	7/4/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX DED: COMP/COLL \$ 1,000 EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WC 9730570	7/4/2021	7/4/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	<b>PROFESSIONAL LIABILITY</b> UNLIMITED PRIOR ACTS	N	N	AEH 288354410	7/4/2021	7/4/2022	EACH CLAIM: \$2,000,000; AGGREGATE: \$2,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
 Recycled Market Assessment, RFP No. 4052. City of Santa Barbara, its officers, employees, and agents are additional insureds as respects general liability and auto liability, and these coverages are primary and non-contributory, as required by written contract. (SEE ATTACHED.)

### CERTIFICATE HOLDER

**18106236**  
 City of Santa Barbara  
 City Clerk  
 P.O. Box 1990  
 Santa Barbara CA 93102-1990

### CANCELLATION See Attachments

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD



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**CONTINUATION DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS (Use only if more space is required)**

Waiver of subrogation applies to workers compensation/employer's liability where allowed by state law and as required by written contract. General Liability, Auto Liability & Workers' Compensation Deductibles: N/A. Professional Liability Deductible: \$400,000.

**ACORD 25 (2016/03)**

**Certificate Holder ID:**



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Attachment Code: D573119 Certificate ID: 18106236



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Attachment Code: D573121 Certificate ID: 18106236

POLICY NUMBER: BAP 9730571

## Notification to Others of Cancellation, Nonrenewal or Reduction of Insurance

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

This endorsement modifies insurance provided under the:

### **Commercial Automobile Coverage Part**

- A.** If we cancel or non-renew this Coverage Part by written notice to the first Named Insured for any reason other than nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation or non-renewal:
1. To the name and address corresponding to each person or organization shown in the Schedule below; and
  2. At least 10 days prior to the effective date of the cancellation or non-renewal, as advised in our notice to the first Named Insured, or the longer number of days notice if indicated in the Schedule below.
- B.** If we cancel this Coverage Part by written notice to the first Named Insured for nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation to the name and address corresponding to each person or organization shown in the Schedule below at least 10 days prior to the effective date of such cancellation.
- C.** If coverage afforded by this Coverage Part is reduced or restricted, except for any reduction of Limits of Insurance due to payment of claims, we will mail or deliver notice of such reduction or restriction:
1. To the name and address corresponding to each person or organization shown in the Schedule below; and
  2. At least 10 days prior to the effective date of the reduction or restriction, or the longer number of days notice if indicated in the Schedule below.
- D.** If notice as described in Paragraphs **A.**, **B.** or **C.** of this endorsement is mailed, proof of mailing will be sufficient proof of such notice.

SCHEDULE	
Name and Address of Other Person(s) / Organization(s):	Number of Days Notice:
All certificate holders where notice of cancellation is required by written contract with the Named Insured	60

All other terms and conditions of this policy remain unchanged.

U-CA-811-A CW (05/10)



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Attachment Code: D573122 Certificate ID: 18106236

POLICY NUMBER: GLO 9730569

## Notification to Others of Cancellation, Nonrenewal or Reduction of Insurance

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

This endorsement modifies insurance provided under the:

**Commercial General Liability Coverage Part  
Liquor Liability Coverage Part  
Products/Completed Operations Liability Coverage Part**

- A.** If we cancel or non-renew this Coverage Part(s) by written notice to the first Named Insured for any reason other than nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation or non-renewal:
1. To the name and address corresponding to each person or organization shown in the Schedule below; and
  2. At least 10 days prior to the effective date of the cancellation or non-renewal, as advised in our notice to the first Named Insured, or the longer number of days notice if indicated in the Schedule below.
- B.** If we cancel this Coverage Part(s) by written notice to the first Named Insured for nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation to the name and address corresponding to each person or organization shown in the Schedule below at least 10 days prior to the effective date of such cancellation.
- C.** If coverage afforded by this Coverage Part(s) is reduced or restricted, except for any reduction of Limits of Insurance due to payment of claims, we will mail or deliver notice of such reduction or restriction:
1. To the name and address corresponding to each person or organization shown in the Schedule below; and
  2. At least 10 days prior to the effective date of the reduction or restriction, or the longer number of days notice if indicated in the Schedule below.
- D.** If notice as described in Paragraphs **A.**, **B.** or **C.** of this endorsement is mailed, proof of mailing will be sufficient proof of such notice.

SCHEDULE	
Name and Address of Other Person(s) / Organization(s):	Number of Days Notice:
All certificate holders where notice of cancellation is required by written contract with the Named Insured	60

All other terms and conditions of this policy remain unchanged.

U-GL-1447-A CW (05/10)



DRAFT

Attachment Code: D573124 Certificate ID: 18106236

**WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY**

**WC 99 06 34**

**NOTIFICATION TO OTHERS OF CANCELLATION, NONRENEWAL OR  
REDUCTION OF INSURANCE ENDORSEMENT**

This endorsement is used to add the following to Part Six of the policy.

**PART SIX  
CONDITIONS**

- A.** If we cancel or non-renew this policy by written notice to you for any reason other than nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation or non-renewal to the name and address corresponding to each person or organization shown in the Schedule below. Notification to such person or organization will be provided at least 10 days prior to the effective date of the cancellation or non-renewal, as advised in our notice to you, or the longer number of days notice if indicated in the Schedule below.
- B.** If we cancel this policy by written notice to you for nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation to the name and address corresponding to each person or organization shown in the Schedule below at least 10 days prior to the effective date of such cancellation.
- C.** If coverage afforded by this policy is reduced or restricted, except for any reduction of Limits of Liability due to payment of claims, we will mail or deliver notice of such reduction or restriction to the name and address corresponding to each person or organization shown in the Schedule below. Notification to such person or organization will be provided at least 10 days prior to the effective date of the reduction or restriction, or the longer number of days notice if indicated in the Schedule below.
- D.** If notice as described in Paragraphs **A.**, **B.** or **C.** of this endorsement is mailed, proof of mailing will be sufficient proof of such notice.

SCHEDULE	
Name and Address of Other Person(s) / Organization(s):	Number of Days Notice:
All certificate holders where notice of cancellation is required by written contract with the Named Insured	60

All other terms and conditions of this policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.  
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Policy No. WC 9730570

Insured CAROLLO ENGINEERS, INC.

Insurance Company Zurich American Insurance Company

**WC 99 06 34**  
(Ed. 05-10)

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DRAFT

Attachment Code: D573125 Certificate ID: 18106236

POLICY NUMBER: BAP 9730571

COMMERCIAL AUTO  
CA 20 48 10 13

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE**

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM  
BUSINESS AUTO COVERAGE FORM  
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

### **SCHEDULE**

**Name Of Person(s) Or Organization(s):**

Any person or organization to whom or which you are required to provide additional insured status or additional insured status on a primary, non-contributory basis, in a written contract or written agreement executed prior to loss, except where such contract or agreement is prohibited by law.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph A.1. of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

CA 20 48 10 13



DRAFT

Attachment Code: D573129 Certificate ID: 18106236

POLICY NUMBER: GLO 9730569

COMMERCIAL GENERAL LIABILITY  
CG 20 37 12 19

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

**SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s)</b>	<b>Location And Description Of Completed Operations</b>
Any person or organization, other than an architect, engineer or surveyor, whom you are required to add as an additional insured under this policy under a written contract mark or written agreement executed prior to loss.	Any Location or project, other than a wrap-up or other consolidated insurance program location or project for which insurance is otherwise separately provided to you by a wrap-up or other consolidated insurance program
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance.

CG 20 37 12 19



DRAFT

Attachment Code: D573128 Certificate ID: 18106236

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**WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY**

**WC 00 03 13**  
(Ed. 04-84)

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**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

**Schedule**

Any person or organization you are required to waive your rights of recovery in a written contract, agreement or permit with the Named Insured.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

**(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)**

Policy No. WC 9730570

Insured CAROLLO ENGINEERS, INC.

Insurance Company Zurich American Insurance Company

WC 00 03 13



DRAFT

Attachment Code: D573181 Certificate ID: 18106236

POLICY NUMBER: GLO 9730569

COMMERCIAL GENERAL LIABILITY  
CG 20 10 12 19

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
Any person or organization, other than an architect, engineer or surveyor, whom you are required to add as an additional insured under this policy under a written contract or written agreement executed prior to loss.	Any Location or project, other than a wrap-up or other consolidated insurance program location or project for which insurance is otherwise separately provided to you by a wrap-up or other consolidated insurance program
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

CG 20 10 12 19



DRAFT

Attachment Code: D573181 Certificate ID: 18106236

**C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

**1. Required by the contract or agreement; or**

**2. Available under the applicable Limits of Insurance;**

**whichever is less.**

**This endorsement shall not increase the applicable Limits of Insurance.**

CG 20 10 12 19



DRAFT

Attachment Code: D579070 Certificate ID: 18106236

POLICY NUMBER: GLO 9730569

## Other Insurance Amendment - Primary and Non-Contributory

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

This endorsement modifies insurance provided under the:

### **Commercial General Liability Coverage Part**

1. The following paragraph is added to the Other Insurance Condition of Section **IV – Commercial General Liability Conditions**:

This insurance is primary insurance to and will not seek contribution from any other insurance available to an additional insured under this policy provided that:

- a. The additional insured is a Named Insured under such other insurance; and
- b. You are required by a written contract or written agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

2. The following paragraph is added to Paragraph 4.b. of the Other Insurance Condition of Section **IV – Commercial General Liability Conditions**:

This insurance is excess over:

Any of the other insurance, whether primary, excess, contingent or on any other basis, available to an additional insured, in which the additional insured on our policy is also covered as an additional insured on another policy providing coverage for the same "occurrence", offense, claim or "suit". This provision does not apply to any policy in which the additional insured is a Named Insured on such other policy and where our policy is required by written contract or written agreement to provide coverage to the additional insured on a primary and non-contributory basis.

All other terms and conditions of this policy remain unchanged.

U-GL-1327-B CW (04/13)





PUBLIC WORKS DEPARTMENT  
**WATER RESOURCES DIVISION**

# RECYCLED WATER MARKET ASSESSMENT

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Water Commission  
January 20, 2022



# Outline

- Project Background
- Overview of City's Recycled Water System
- Future of Potable Reuse
- Project Scope of Work and Contracting





## Project Background

- Policy recommendation from the EUWMP: update the 2009 Recycled Water Expansion Assessment
  - Perform a cost-benefit analysis to identify opportunities for increased recycled water consumption.
- Recycled water is an environmentally-responsible, drought-proof supply that offsets potable water use.
- The City wishes to maximize the use of its current recycled water system to the extent it is cost-effective.



# Santa Barbara's Recycled Water History

- Early 1980's: planning
- 1989: Phase I completed
  - Tertiary treatment plant with carbon filtration and disinfection, distribution reservoir, pump station and 5.1 miles of distribution main
- 1992: Phase II completed
  - Additional pump station and reservoir and 8.3 miles of distribution main



## Santa Barbara's Recycled Water History Continued

- 2009: Water Supply Planning Study included recycled water market assessment and analysis of potential pipeline extensions
- 2015: Upgrades to tertiary treatment plant to include microfiltration/ultrafiltration









## Who Can Use Recycled Water?

- Entirely separate system from potable system
- Onsite supervisor required
- Large landscape: parks, schools, HOAs, golf courses
- Limited toilet flushing and dust control
- Water sales agreements required for sales to other water agencies. Staff requires direction from Council to begin agreement negotiations



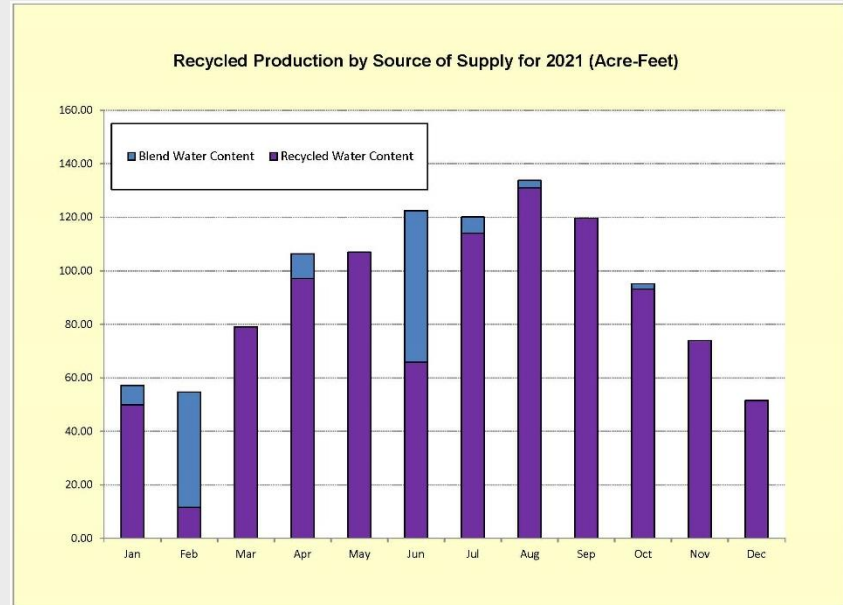
## Recycled Water Costs

- RW customers pay for O&M costs related to the recycled water program and portion of capital costs for annual system renewal and replacement needs
  - *Potable water funds major improvements to the water system, since RW provides a reduction in potable water demands*
- Recycled water is one of our more expensive supplies: ~\$1,400/AF
- Current RW customer rate: \$4.53/HCF
- Recycled water treatment is energy intensive



# City's Recycled Water Production & Demand

- EEWRC Design Capacity: 11 MGD
- EEWRC Average Daily Flow: 6 MGD
- RW peak production capacity: 2.5 MGD (~3,000 AFY)
- Low irrigation demands in spring, fall, winter: capacity is essentially 1,400 AFY





# City's Recycled Water Production & Demand

- Recycled Water Demand: ~1,000 AFY
  - ~230 AF El Estero process water
  - ~9% of total City demand
- New connections since 2009 Market Assessment: 7 connections for a total of ~100 AFY
- New La Cumbre RW sales agreement: 40 – 100 AFY
- Therefore, **~200 AFY of remaining demand for new customers.**





# Future of Potable Reuse

- 2017 Potable Reuse Feasibility Study
  - Raw water augmentation at Lauro Reservoir
  - RW distribution system repurposed to move advanced treated water to Lauro/Cater WTP





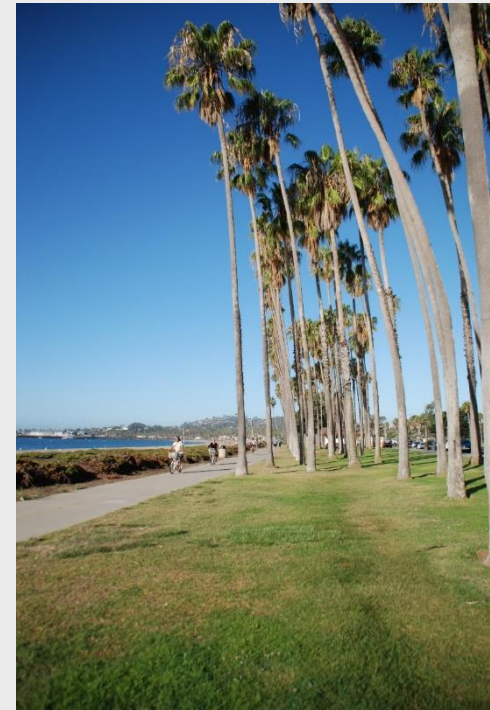
## Potable Reuse Potential

- 2020 EUWMP: Potable reuse shown to be 2<sup>nd</sup> best performing new supply for the City after desal expansion
  - Considered 2,900 and 6,000 AFY of potable reuse production
  - Additional evaluation needed: costs and regulatory uncertainty
  - 15+ years out, but drives timeline of RW Market Assess.
- Potential production capacity: 5 MGD (~6,000 AFY)
  - Some brine discharge will be produced



## Recycled Water Market Assessment Scope of Work

- Evaluate City's current non-potable recycled water demand and system
- New recycled water demand analysis
- Cost effective analysis
- Consideration of future potable reuse
- Uncertainty analysis





## Potential Sites Already Identified by Staff

- Peabody Charter School
- East Beach Townhomes
- Hyatt
- Clark Estate
- De La Guerra Plaza
- Alameda Park
- Alice Keck Park
- County Courthouse
- 35 Anacapa Street





## Project Contracting

- Carollo Engineers, Inc. selected as best suited to conduct RW Market Assessment through competitive bidding process
  - Extensive RW and City Experience
  - Lowest cost proposal. Project cost: \$61,200
- Timeline
  - Kick off: February 2022
  - Final report: July 2022



# Questions?

