

**CITY OF PALO ALTO CONTRACT NO. C24189086**

**AGREEMENT FOR PROFESSIONAL SERVICES**

**BETWEEN THE CITY OF PALO ALTO AND CAROLLO ENGINEERS, INC.**

This Agreement for Professional Services (this “Agreement”) is entered into as of the 10th day of June 2024 (the “Effective Date”), by and between the CITY OF PALO ALTO, a California chartered municipal corporation (“CITY”), and CAROLLO ENGINEERS, INC., located at 2795 Mitchell Drive, Walnut Creek, CA 94598-1601 (“CONSULTANT”).

The following recitals are a substantive portion of this Agreement and are fully incorporated herein by this reference:

**RECITALS**

A. CITY intends to perform and update its Long Range Facilities Plan for the Regional Water Quality Control Plant (RWQCP) the “Project”) and desires to engage a consultant to provide engineering and other required services in connection with the Project (the “Services”, as detailed more fully in Exhibit A).

B. CONSULTANT represents that it, its employees and subconsultants, if any, possess the necessary professional expertise, qualifications, and capability, and all required licenses and/or certifications to provide the Services.

C. CITY, in reliance on these representations, desires to engage CONSULTANT to provide the Services as more fully described in Exhibit A, entitled “SCOPE OF SERVICES”.

NOW, THEREFORE, in consideration of the recitals, covenants, terms, and conditions, in this Agreement, the parties agree as follows:

**SECTION 1. SCOPE OF SERVICES.** CONSULTANT shall perform the Services described in Exhibit A in accordance with the terms and conditions contained in this Agreement. The performance of all Services shall be to the reasonable satisfaction of CITY.

**SECTION 2. TERM.**

The term of this Agreement shall be from the date of its full execution through June 30, 2027 unless terminated earlier pursuant to Section 19 (Termination) of this Agreement.

**SECTION 3. SCHEDULE OF PERFORMANCE.** Time is of the essence in the performance of Services under this Agreement. CONSULTANT shall complete the Services within the term of this Agreement and in accordance with the schedule set forth in Exhibit B, entitled “SCHEDULE OF PERFORMANCE”. Any Services for which times for performance are not specified in this Agreement shall be commenced and completed by CONSULTANT in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the CONSULTANT. CITY’s agreement to extend the term or the schedule for performance shall not preclude recovery of damages for delay if the extension is required due to the fault of CONSULTANT.

**SECTION 4. NOT TO EXCEED COMPENSATION.** The compensation to be paid to CONSULTANT for performance of the Services shall be based on the compensation structure detailed in Exhibit C, entitled “COMPENSATION,” including any reimbursable expenses specified therein, and the maximum total compensation shall not exceed **Two Million Four Hundred Ninety-Three Thousand Four Hundred Thirty-One Dollars (\$2,493,431)**. The hourly schedule of rates, if applicable, is set out in Exhibit C-1, entitled “SCHEDULE OF RATES.” Any work performed or expenses incurred for which payment would result in a total exceeding the maximum compensation set forth in this Section 4 shall be at no cost to the CITY.

☒ **Optional Additional Services Provision** (This provision applies only if checked and a not-to-exceed compensation amount for Additional Services is allocated below under this Section 4.)

In addition to the not-to-exceed compensation specified above, CITY has set aside the not-to-exceed compensation amount of **Two Hundred Forty-Nine Thousand Three Hundred Forty-Three Dollars (\$249,343)** for the performance of Additional Services (as defined below). The total compensation for performance of the Services, Additional Services and any reimbursable expenses specified in Exhibit C, shall not exceed **Two Million Seven Hundred Forty-Two Thousand Seven Hundred Seventy-Four Dollars (\$2,742,774)**, as detailed in Exhibit C.

“Additional Services” means any work that is determined by CITY to be necessary for the proper completion of the Project, but which is not included within the Scope of Services described at Exhibit A. CITY may elect to, but is not required to, authorize Additional Services up to the maximum amount of compensation set forth for Additional Services in this Section 4. CONSULTANT shall provide Additional Services only by advanced, written authorization from CITY as detailed in this Section. Additional Services, if any, shall be authorized by CITY with a Task Order assigned and authorized by CITY’s Project Manager, as identified in Section 13 (Project Management). Each Task Order shall be in substantially the same form as Exhibit A-1, entitled “PROFESSIONAL SERVICES TASK ORDER”. Each Task Order shall contain a specific scope of services, schedule of performance and maximum compensation amount, in accordance with the provisions of this Agreement. Compensation for Additional Services shall be specified by CITY in the Task Order, based on whichever is lowest: the compensation structure set forth in Exhibit C, the hourly rates set forth in Exhibit C-1, or a negotiated lump sum.

To accept a Task Order, CONSULTANT shall sign the Task Order and return it to CITY’s Project Manager within the time specified by the Project Manager, and upon authorization by CITY (defined as counter-signature by the CITY Project Manager), the fully executed Task Order shall become part of this Agreement. The cumulative total compensation to CONSULTANT for all Task Orders authorized under this Agreement shall not exceed the amount of compensation set forth for Additional Services in this Section 4. CONSULTANT shall only be compensated for Additional Services performed under an authorized Task Order and only up to the maximum amount of compensation set forth for Additional Services in this Section 4. Performance of and payment for any Additional Services are subject to all requirements and restrictions in this Agreement.

**SECTION 5. INVOICES.** In order to request payment, CONSULTANT shall submit monthly

invoices to the CITY describing the Services performed and the applicable charges (including, if applicable, an identification of personnel who performed the Services, hours worked, hourly rates, and reimbursable expenses), based upon Exhibit C or, as applicable, CONSULTANT's schedule of rates set forth in Exhibit C-1. If applicable, the invoice shall also describe the percentage of completion of each task. The information in CONSULTANT's invoices shall be subject to verification by CITY. CONSULTANT shall send all invoices to CITY's Project Manager at the address specified in Section 13 (Project Management) below. CITY will generally process and pay invoices within thirty (30) days of receipt of an acceptable invoice.

**SECTION 6. QUALIFICATIONS/STANDARD OF CARE.** All Services shall be performed by CONSULTANT or under CONSULTANT's supervision. CONSULTANT represents that it, its employees and subcontractors, if any, possess the professional and technical personnel necessary to perform the Services required by this Agreement and that the personnel have sufficient skill and experience to perform the Services assigned to them. CONSULTANT represents that it, its employees and subcontractors, if any, have and shall maintain during the term of this Agreement all licenses, permits, qualifications, insurance and approvals of whatever nature that are legally required to perform the Services. All Services to be furnished by CONSULTANT under this Agreement shall meet the professional standard and quality that prevail among professionals in the same discipline and of similar knowledge and skill engaged in related work throughout California under the same or similar circumstances.

**SECTION 7. COMPLIANCE WITH LAWS.** CONSULTANT shall keep itself informed of and in compliance with all federal, state and local laws, ordinances, regulations, and orders that may affect in any manner the Project or the performance of the Services or those engaged to perform Services under this Agreement, as amended from time to time. CONSULTANT shall procure all permits and licenses, pay all charges and fees, and give all notices required by law in the performance of the Services.

**SECTION 8. ERRORS/OMISSIONS.** CONSULTANT is solely responsible for costs, including, but not limited to, increases in the cost of Services, arising from or caused by CONSULTANT's errors and omissions, including, but not limited to, the costs of corrections such errors and omissions, any change order markup costs, or costs arising from delay caused by the errors and omissions or unreasonable delay in correcting the errors and omissions.

**SECTION 9. COST ESTIMATES.** If this Agreement pertains to the design of a public works project, CONSULTANT shall submit estimates of probable construction costs at each phase of design submittal. If the total estimated construction cost at any submittal exceeds the CITY's stated construction budget by ten percent (10%) or more, CONSULTANT shall make recommendations to CITY for aligning the Project design with the budget, incorporate CITY approved recommendations, and revise the design to meet the Project budget, at no additional cost to CITY.

**SECTION 10. INDEPENDENT CONTRACTOR.** CONSULTANT acknowledges and agrees that CONSULTANT and any agent or employee of CONSULTANT will act as and shall be deemed at all times to be an independent contractor and shall be wholly responsible for the manner in which CONSULTANT performs the Services requested by CITY under this Agreement. CONSULTANT and any agent or employee of CONSULTANT will not have employee status with CITY, nor be entitled to participate in any plans, arrangements, or distributions by CITY

pertaining to or in connection with any retirement, health or other benefits that CITY may offer its employees. CONSULTANT will be responsible for all obligations and payments, whether imposed by federal, state or local law, including, but not limited to, FICA, income tax withholdings, workers' compensation, unemployment compensation, insurance, and other similar responsibilities related to CONSULTANT's performance of the Services, or any agent or employee of CONSULTANT providing same. Nothing in this Agreement shall be construed as creating an employment or agency relationship between CITY and CONSULTANT or any agent or employee of CONSULTANT. Any terms in this Agreement referring to direction from CITY shall be construed as providing for direction as to policy and the result of CONSULTANT's provision of the Services only, and not as to the means by which such a result is obtained.

**SECTION 11. ASSIGNMENT.** The parties agree that the expertise and experience of CONSULTANT are material considerations for this Agreement. CONSULTANT shall not assign or transfer any interest in this Agreement nor the performance of any of CONSULTANT's obligations hereunder without the prior written approval of the City Manager. Any purported assignment made without the prior written approval of the City Manager will be void and without effect. Subject to the foregoing, the covenants, terms, conditions and provisions of this Agreement will apply to, and will bind, the heirs, successors, executors, administrators and assignees of the parties.

**SECTION 12. SUBCONTRACTING.**

☐ **Option A: No Subcontractor:** CONSULTANT shall not subcontract any portion of the Services to be performed under this Agreement without the prior written authorization of the City Manager or designee. In the event CONSULTANT does subcontract any portion of the work to be performed under this Agreement, CONSULTANT shall be fully responsible for all acts and omissions of subcontractors.

☒ **Option B: Subcontracts Authorized:** Notwithstanding Section 11 (Assignment) above, CITY agrees that subcontractors may be used to complete the Services. The subcontractors authorized by CITY to perform work on this Project are:

Jacobs Engineering, Inc.

Bartle Wells Associates (BWA)

CONSULTANT shall be responsible for directing the work of any subcontractors and for any compensation due to subcontractors. CITY assumes no responsibility whatsoever concerning compensation of subcontractors. CONSULTANT shall be fully responsible to CITY for all acts and omissions of subcontractors. CONSULTANT shall change or add subcontractors only with the prior written approval of the City Manager or designee.

**SECTION 13. PROJECT MANAGEMENT.** CONSULTANT will assign Rashi Gupta, P.E., Telephone: 714-788-1925, Email: [RGupta@carollo.com](mailto:RGupta@carollo.com), as the CONSULTANT's Project Manager to have supervisory responsibility for the performance, progress, and execution of the Services and represent CONSULTANT during the day-to-day performance of the Services. If circumstances cause the substitution of the CONSULTANT's Project Manager or any other of CONSULTANT's key personnel for any reason, the appointment of a substitute Project Manager and the assignment of any key new or replacement personnel will be subject to the prior written approval of the CITY's Project Manager. CONSULTANT, at CITY's request, shall promptly

remove CONSULTANT personnel who CITY finds do not perform the Services in an acceptable manner, are uncooperative, or present a threat to the adequate or timely completion of the Services or a threat to the safety of persons or property.

CITY's Project Manager is Connie Li, P.E., Public Works Department, Environmental Services Division, RWQCP, 2501 Embarcadero Way, Palo Alto, CA, 94303, Telephone: 650-329-2238, Email: [connie.li@cityofpaloalto.org](mailto:connie.li@cityofpaloalto.org). CITY's Project Manager will be CONSULTANT's point of contact with respect to performance, progress and execution of the Services. CITY may designate an alternate Project Manager from time to time.

**SECTION 14. OWNERSHIP OF MATERIALS.** All work product, including without limitation, all writings, drawings, studies, sketches, photographs, plans, reports, specifications, computations, models, recordings, data, documents, and other materials and copyright interests developed under this Agreement, in any form or media, shall be and remain the exclusive property of CITY without restriction or limitation upon their use. CONSULTANT agrees that all copyrights which arise from creation of the work product pursuant to this Agreement are vested in CITY, and CONSULTANT hereby waives and relinquishes all claims to copyright or other intellectual property rights in favor of CITY. Neither CONSULTANT nor its subcontractors, if any, shall make any of such work product available to any individual or organization without the prior written approval of the City Manager or designee. CONSULTANT makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the Scope of Services.

**SECTION 15. AUDITS.** CONSULTANT agrees to permit CITY and its authorized representatives to audit, at any reasonable time during the term of this Agreement and for four (4) years from the date of final payment, CONSULTANT's records pertaining to matters covered by this Agreement, including without limitation records demonstrating compliance with the requirements of Section 10 (Independent Contractor). CONSULTANT further agrees to maintain and retain accurate books and records in accordance with generally accepted accounting principles for at least four (4) years after the expiration or earlier termination of this Agreement or the completion of any audit hereunder, whichever is later.

**SECTION 16. INDEMNITY.**

☒[Option A applies to the following design professionals pursuant to Civil Code Section 2782.8: architects; landscape architects; registered professional engineers and licensed professional land surveyors.] 16.1. To the fullest extent permitted by law, CONSULTANT shall indemnify, defend and hold harmless CITY, its Council members, officers, employees and agents (each an "Indemnified Party") from and against any and all third party demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorney's fees, experts fees, court costs and disbursements ("Claims") to the extent that such Claims arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT, its officers, employees, agents or contractors under this Agreement, regardless of whether or not it is caused in part by an Indemnified Party. CITY will reimburse CONSULTANT for the proportionate percentage of defense costs exceeding CONSULTANT's proportionate percentage of fault as determined by the final judgment of a court of competent jurisdiction.

☐[Option B applies to any consultant who does not qualify as a design professional as defined in Civil Code Section 2782.8.] 16.1. To the fullest extent permitted by law, CONSULTANT shall indemnify, defend and hold harmless CITY, its Council members, officers, employees and agents (each an “Indemnified Party”) from and against any and all demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorney’s fees, experts fees, court costs and disbursements (“Claims”) resulting from, arising out of or in any manner related to performance or nonperformance by CONSULTANT, its officers, employees, agents or contractors under this Agreement, regardless of whether or not it is caused in part by an Indemnified Party.

16.2. Notwithstanding the above, nothing in this Section 16 shall be construed to require CONSULTANT to indemnify an Indemnified Party from a Claim arising from the active negligence or willful misconduct of an Indemnified Party that is not contributed to by any act of, or by any omission to perform a duty imposed by law or agreement by, CONSULTANT, its officers, employees, agents or contractors under this Agreement.

16.3. The acceptance of CONSULTANT’s Services and duties by CITY shall not operate as a waiver of the right of indemnification. The provisions of this Section 16 shall survive the expiration or early termination of this Agreement.

**SECTION 17. WAIVERS.** No waiver of a condition or nonperformance of an obligation under this Agreement is effective unless it is in writing in accordance with Section 29.4 of this Agreement. No delay or failure to require performance of any provision of this Agreement shall constitute a waiver of that provision as to that or any other instance. Any waiver granted shall apply solely to the specific instance expressly stated. No single or partial exercise of any right or remedy will preclude any other or further exercise of any right or remedy.

## **SECTION 18. INSURANCE.**

18.1. CONSULTANT, at its sole cost and expense, shall obtain and maintain, in full force and effect during the term of this Agreement, the insurance coverage described in Exhibit D, entitled “INSURANCE REQUIREMENTS”. CONSULTANT and its contractors, if any, shall obtain a policy endorsement naming CITY as an additional insured under any general liability or automobile policy or policies.

18.2. All insurance coverage required hereunder shall be provided through carriers with AM Best’s Key Rating Guide ratings of A-:VII or higher which are licensed or authorized to transact insurance business in the State of California. Any and all contractors of CONSULTANT retained to perform Services under this Agreement will obtain and maintain, in full force and effect during the term of this Agreement, identical insurance coverage, naming CITY as an additional insured under such policies as required above.

18.3. Certificates evidencing such insurance shall be filed with CITY concurrently with the execution of this Agreement. The certificates will be subject to the approval of CITY’s Risk Manager and will contain an endorsement stating that the insurance is primary coverage and will not be canceled, or materially reduced in coverage or limits, by the insurer except after filing with the Purchasing Manager thirty (30) days’ prior written notice of the cancellation

or modification. If the insurer cancels or modifies the insurance and provides less than thirty (30) days' notice to CONSULTANT, CONSULTANT shall provide the Purchasing Manager written notice of the cancellation or modification within two (2) business days of the CONSULTANT's receipt of such notice. CONSULTANT shall be responsible for ensuring that current certificates evidencing the insurance are provided to CITY's Chief Procurement Officer during the entire term of this Agreement.

18.4. The procuring of such required policy or policies of insurance will not be construed to limit CONSULTANT's liability hereunder nor to fulfill the indemnification provisions of this Agreement. Notwithstanding the policy or policies of insurance, CONSULTANT will be obligated for the full and total amount of any damage, injury, or loss caused by or directly arising as a result of the Services performed under this Agreement, including such damage, injury, or loss arising after the Agreement is terminated or the term has expired.

## **SECTION 19. TERMINATION OR SUSPENSION OF AGREEMENT OR SERVICES.**

19.1. The City Manager may suspend the performance of the Services, in whole or in part, or terminate this Agreement, with or without cause, by giving ten (10) days prior written notice thereof to CONSULTANT. If CONSULTANT fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided under this Agreement or at law, the City Manager may terminate this Agreement sooner upon written notice of termination. Upon receipt of any notice of suspension or termination, CONSULTANT will discontinue its performance of the Services on the effective date in the notice of suspension or termination.

19.2. In event of suspension or termination, CONSULTANT will deliver to the City Manager on or before the effective date in the notice of suspension or termination, any and all work product, as detailed in Section 14 (Ownership of Materials), whether or not completed, prepared by CONSULTANT or its contractors, if any, in the performance of this Agreement. Such work product is the property of CITY, as detailed in Section 14 (Ownership of Materials).

19.3. In event of suspension or termination, CONSULTANT will be paid for the Services rendered and work products delivered to CITY in accordance with the Scope of Services up to the effective date in the notice of suspension or termination; provided, however, if this Agreement is suspended or terminated on account of a default by CONSULTANT, CITY will be obligated to compensate CONSULTANT only for that portion of CONSULTANT's Services provided in material conformity with this Agreement as such determination is made by the City Manager acting in the reasonable exercise of his/her discretion. The following Sections will survive any expiration or termination of this Agreement: 14, 15, 16, 17, 19.2, 19.3, 19.4, 20, 25, 27, 28, 29 and 30.

19.4. No payment, partial payment, acceptance, or partial acceptance by CITY will operate as a waiver on the part of CITY of any of its rights under this Agreement, unless made in accordance with Section 17 (Waivers).

## **SECTION 20. NOTICES.**

All notices hereunder will be given in writing and mailed, postage prepaid, by

certified mail, addressed as follows:

To CITY: Office of the City Clerk  
City of Palo Alto  
Post Office Box 10250  
Palo Alto, CA 94303

With a copy to the Purchasing Manager

To CONSULTANT: Attention of the Project Manager at the address of  
CONSULTANT recited on the first page of this Agreement.

CONSULTANT shall provide written notice to CITY of any change of address.

## **SECTION 21. CONFLICT OF INTEREST.**

21.1. In executing this Agreement, CONSULTANT covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the Services.

21.2. CONSULTANT further covenants that, in the performance of this Agreement, it will not employ subcontractors or other persons or parties having such an interest. CONSULTANT certifies that no person who has or will have any financial interest under this Agreement is an officer or employee of CITY; this provision will be interpreted in accordance with the applicable provisions of the Palo Alto Municipal Code and the Government Code of the State of California, as amended from time to time. CONSULTANT agrees to notify CITY if any conflict arises.

21.3. If the CONSULTANT meets the definition of a “Consultant” as defined by the Regulations of the Fair Political Practices Commission, CONSULTANT will file the appropriate financial disclosure documents required by the Palo Alto Municipal Code and the Political Reform Act of 1974, as amended from time to time.

## **SECTION 22. NONDISCRIMINATION; COMPLIANCE WITH ADA.**

22.1. As set forth in Palo Alto Municipal Code Section 2.30.510, as amended from time to time, CONSULTANT certifies that in the performance of this Agreement, it shall not discriminate in the employment of any person due to that person’s race, skin color, gender, gender identity, age, religion, disability, national origin, ancestry, sexual orientation, pregnancy, genetic information or condition, housing status, marital status, familial status, weight or height of such person. CONSULTANT acknowledges that it has read and understands the provisions of Section 2.30.510 of the Palo Alto Municipal Code relating to Nondiscrimination Requirements and the penalties for violation thereof, and agrees to meet all requirements of Section 2.30.510 pertaining to nondiscrimination in employment.

22.2. CONSULTANT understands and agrees that pursuant to the Americans Disabilities Act (“ADA”), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor or subcontractor, are required to be accessible



to the disabled public. CONSULTANT will provide the Services specified in this Agreement in a manner that complies with the ADA and any other applicable federal, state and local disability rights laws and regulations, as amended from time to time. CONSULTANT will not discriminate against persons with disabilities in the provision of services, benefits or activities provided under this Agreement.

**SECTION 23. ENVIRONMENTALLY PREFERRED PURCHASING AND ZERO WASTE REQUIREMENTS.** CONSULTANT shall comply with the CITY's Environmentally Preferred Purchasing policies which are available at CITY's Purchasing Department, hereby incorporated by reference and as amended from time to time. CONSULTANT shall comply with waste reduction, reuse, recycling and disposal requirements of CITY's Zero Waste Program. Zero Waste best practices include, first, minimizing and reducing waste; second, reusing waste; and, third, recycling or composting waste. In particular, CONSULTANT shall comply with the following Zero Waste requirements:

(a) All printed materials provided by CONSULTANT to CITY generated from a personal computer and printer including but not limited to, proposals, quotes, invoices, reports, and public education materials, shall be double-sided and printed on a minimum of 30% or greater post-consumer content paper, unless otherwise approved by CITY's Project Manager. Any submitted materials printed by a professional printing company shall be a minimum of 30% or greater post-consumer material and printed with vegetable-based inks.

(b) Goods purchased by CONSULTANT on behalf of CITY shall be purchased in accordance with CITY's Environmental Purchasing Policy including but not limited to Extended Producer Responsibility requirements for products and packaging. A copy of this policy is on file at the Purchasing Department's office.

(c) Reusable/returnable pallets shall be taken back by CONSULTANT, at no additional cost to CITY, for reuse or recycling. CONSULTANT shall provide documentation from the facility accepting the pallets to verify that pallets are not being disposed.

**SECTION 24. COMPLIANCE WITH PALO ALTO MINIMUM WAGE ORDINANCE.** CONSULTANT shall comply with all requirements of the Palo Alto Municipal Code Chapter 4.62 (Citywide Minimum Wage), as amended from time to time. In particular, for any employee otherwise entitled to the State minimum wage, who performs at least two (2) hours of work in a calendar week within the geographic boundaries of the City, CONSULTANT shall pay such employees no less than the minimum wage set forth in Palo Alto Municipal Code Section 4.62.030 for each hour worked within the geographic boundaries of the City of Palo Alto. In addition, CONSULTANT shall post notices regarding the Palo Alto Minimum Wage Ordinance in accordance with Palo Alto Municipal Code Section 4.62.060.

**SECTION 25. NON-APPROPRIATION.** This Agreement is subject to the fiscal provisions of the Charter of the City of Palo Alto and the Palo Alto Municipal Code, as amended from time to time. This Agreement will terminate without any penalty (a) at the end of any fiscal year in the event that funds are not appropriated for the following fiscal year, or (b) at any time within a fiscal year in the event that funds are only appropriated for a portion of the fiscal year and funds for this Agreement are no longer available. This Section shall take precedence in the event of a conflict with any other covenant, term, condition, or provision of this Agreement.

**SECTION 26. PREVAILING WAGES AND DIR REGISTRATION FOR PUBLIC WORKS CONTRACTS.**

☒ 26.1. **This Project is not subject to prevailing wages and related requirements.** CONSULTANT is not required to pay prevailing wages and meet related requirements under the California Labor Code and California Code of Regulations in the performance and implementation of the Project if the contract:

- (1) is not a public works contract;
- (2) is for a public works construction project of \$25,000 or less, per California Labor Code Sections 1782(d)(1), 1725.5(f) and 1773.3(j); or
- (3) is for a public works alteration, demolition, repair, or maintenance project of \$15,000 or less, per California Labor Code Sections 1782(d)(1), 1725.5(f) and 1773.3(j).

**OR**

☐ 26.1. **This Project is subject to prevailing wages and related requirements as a “public works” under California Labor Code Sections 1720 et seq. and related regulations.** CONSULTANT is required to pay general prevailing wages as defined in California Labor Code Section 1773.1 and Subchapter 3, Title 8 of the California Code of Regulations Section 16000 et seq., as amended from time to time. Pursuant to Labor Code Section 1773, the CITY has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of worker needed to execute the contract for this Project from the State of California Department of Industrial Relations (“DIR”). Copies of these rates may be obtained at the CITY’s Purchasing Department office. The general prevailing wage rates are also available at the DIR, Division of Labor Statistics and Research, web site (see e.g. <http://www.dir.ca.gov/DLSR/PWD/index.htm>) as amended from time to time. CONSULTANT shall post a copy of the general prevailing wage rates at all Project job sites and shall pay the adopted prevailing wage rates as a minimum. CONSULTANT shall comply with all applicable provisions of Division 2, Part 7, Chapter 1 of the California Labor Code (Labor Code Section 1720 et seq.), including but not limited to Sections 1725.5, 1771, 1771.1, 1771.4, 1773.2, 1774, 1775, 1776, 1777.5, 1782, 1810, 1813 and 1815, and all applicable implementing regulations, including but not limited to Subchapter 3, Title 8 of the California Code of Regulations Section 16000 et seq. (8 CCR Section 16000 et seq.), as amended from time to time. CONSULTANT shall comply with the requirements of Exhibit E, entitled “DIR REGISTRATION FOR PUBLIC WORKS CONTRACTS”, for any contract for public works construction, alteration, demolition, repair or maintenance, including but not limited to the obligations to register with, and furnish certified payroll records directly to, DIR.

**SECTION 27. CLAIMS PROCEDURE FOR “9204 PUBLIC WORKS PROJECTS”.** For purposes of this Section 27, a “9204 Public Works Project” means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind. (Cal. Pub. Cont. Code § 9204.) Per California Public Contract Code Section 9204, for Public Works Projects, certain claims procedures shall apply, as set forth in Exhibit F, entitled “Claims for Public Contract Code Section 9204 Public Works Projects”.

☐ **This Project is a 9204 Public Works Project** and is required to comply with the claims procedures set forth in Exhibit F, entitled “Claims for Public Contract Code Section 9204 Public Works Projects”.

**OR**



**This Project is not a 9204 Public Works Project.**

**SECTION 28. CONFIDENTIAL INFORMATION.**

28.1. In the performance of this Agreement, CONSULTANT may have access to CITY's Confidential Information (defined below). CONSULTANT will hold Confidential Information in strict confidence, not disclose it to any third party, and will use it only for the performance of its obligations to CITY under this Agreement and for no other purpose. CONSULTANT will maintain reasonable and appropriate administrative, technical and physical safeguards to ensure the security, confidentiality and integrity of the Confidential Information. Notwithstanding the foregoing, CONSULTANT may disclose Confidential Information to its employees, agents and subcontractors, if any, to the extent they have a need to know in order to perform CONSULTANT's obligations to CITY under this Agreement and for no other purpose, provided that the CONSULTANT informs them of, and requires them to follow, the confidentiality and security obligations of this Agreement.

28.2. "Confidential Information" means all data, information (including without limitation "Personal Information" about a California resident as defined in Civil Code Section 1798 et seq., as amended from time to time) and materials, in any form or media, tangible or intangible, provided or otherwise made available to CONSULTANT by CITY, directly or indirectly, pursuant to this Agreement. Confidential Information excludes information that CONSULTANT can show by appropriate documentation: (i) was publicly known at the time it was provided or has subsequently become publicly known other than by a breach of this Agreement; (ii) was rightfully in CONSULTANT's possession free of any obligation of confidence prior to receipt of Confidential Information; (iii) is rightfully obtained by CONSULTANT from a third party without breach of any confidentiality obligation; (iv) is independently developed by employees of CONSULTANT without any use of or access to the Confidential Information; or (v) CONSULTANT has written consent to disclose signed by an authorized representative of CITY.

28.3. Notwithstanding the foregoing, CONSULTANT may disclose Confidential Information to the extent required by order of a court of competent jurisdiction or governmental body, provided that CONSULTANT will notify CITY in writing of such order immediately upon receipt and prior to any such disclosure (unless CONSULTANT is prohibited by law from doing so), to give CITY an opportunity to oppose or otherwise respond to such order.

28.4. CONSULTANT will notify City promptly upon learning of any breach in the security of its systems or unauthorized disclosure of, or access to, Confidential Information in its possession or control, and if such Confidential Information consists of Personal Information, CONSULTANT will provide information to CITY sufficient to meet the notice requirements of Civil Code Section 1798 et seq., as applicable, as amended from time to time.

28.5. Prior to or upon termination or expiration of this Agreement, CONSULTANT will honor any request from the CITY to return or securely destroy all copies of Confidential Information. All Confidential Information is and will remain the property of the CITY and nothing contained in this Agreement grants or confers any rights to such Confidential

Information on CONSULTANT.

28.6. If selected in Section 30 (Exhibits), this Agreement is also subject to the terms and conditions of the Information Privacy Policy and Cybersecurity Terms and Conditions.

## **SECTION 29. MISCELLANEOUS PROVISIONS.**

29.1. This Agreement will be governed by California law, without regard to its conflict of law provisions.

29.2. In the event that an action is brought, the parties agree that trial of such action will be vested exclusively in the state courts of California in the County of Santa Clara, State of California.

29.3. The prevailing party in any action brought to enforce the provisions of this Agreement may recover its reasonable costs and attorneys' fees expended in connection with that action. The prevailing party shall be entitled to recover an amount equal to the fair market value of legal services provided by attorneys employed by it as well as any attorneys' fees paid to third parties.

29.4. This Agreement, including all exhibits, constitutes the entire and integrated agreement between the parties with respect to the subject matter of this Agreement, and supersedes all prior agreements, negotiations, representations, statements and undertakings, either oral or written. This Agreement may be amended only by a written instrument, which is signed by the authorized representatives of the parties and approved as required under Palo Alto Municipal Code, as amended from time to time.

29.5. If a court of competent jurisdiction finds or rules that any provision of this Agreement is void or unenforceable, the unaffected provisions of this Agreement will remain in full force and effect.

29.6. In the event of a conflict between the terms of this Agreement and the exhibits hereto (per Section 30) or CONSULTANT's proposal (if any), the Agreement shall control. In the event of a conflict between the exhibits hereto and CONSULTANT's proposal (if any), the exhibits shall control.

29.7. The provisions of all checked boxes in this Agreement shall apply to this Agreement; the provisions of any unchecked boxes shall not apply to this Agreement.

29.8. All section headings contained in this Agreement are for convenience and reference only and are not intended to define or limit the scope of any provision of this Agreement.

29.9. This Agreement may be signed in multiple counterparts, which, when executed by the authorized representatives of the parties, shall together constitute a single binding agreement.

29.10. **CITY-PROVIDED INFORMATION.** The CITY shall furnish the CONSULTANT available studies, reports and other data it deems necessary for CONSULTANT's performances of Services under this Agreement, which CONSULTANT may use and rely upon to perform

those Services, so long as CONSULTANT's use of any Confidential Information complies with Section 28.

29.11. **ESTIMATES AND PROJECTIONS.** CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, over the incoming water quality and/or quantity, or over the way the 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 judgment.

29.12. **THIRD PARTIES.** The Services to be performed by CONSULTANT are intended solely for the benefit of the CITY.

**SECTION 30. EXHIBITS.** Each of the following exhibits, if the check box for such exhibit is selected below, is hereby attached and incorporated into this Agreement by reference as though fully set forth herein:

- ☒ EXHIBIT A: SCOPE OF SERVICES
- ☒ EXHIBIT A-1 PROFESSIONAL SERVICES TASK ORDER
- ☒ EXHIBIT B: SCHEDULE OF PERFORMANCE
- ☒ EXHIBIT C: COMPENSATION
- ☒ EXHIBIT C-1: SCHEDULE OF RATES
- ☒ EXHIBIT D: INSURANCE REQUIREMENTS

***THIS AGREEMENT IS NOT COMPLETE UNLESS ALL SELECTED EXHIBITS ARE ATTACHED.***

CONTRACT No. C24189086 SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement as of the date first above written.

CITY OF PALO ALTO

CAROLLO ENGINEERS, INC.

Officer 1

DocuSigned by:  
Rick Chan, Senior Vice President  
9B7DA73AC859451...

By: \_\_\_\_\_

Rick Chan, Senior Vice President

Name: \_\_\_\_\_

Senior Vice President

Title: \_\_\_\_\_

\_\_\_\_\_  
City Manager

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney or designee

Officer 2

DocuSigned by:  
Anne E. Prudhel  
F7A59CC11E5E4E7...

By: \_\_\_\_\_

Anne E. Prudhel

Name: \_\_\_\_\_

Executive Vice President

Title: \_\_\_\_\_

## **EXHIBIT A SCOPE OF SERVICES**

CONSULTANT shall provide the Services detailed in this Exhibit A, entitled “SCOPE OF SERVICES”. Notwithstanding any provision herein to the contrary, CONSULTANT’s duties and services described in this Scope of Services shall not include preparing or assisting CITY with any portion of CITY’s preparation of a request for proposals, request for qualifications, or any other solicitation regarding a subsequent or additional contract with CITY. CITY shall at all times retain responsibility for public contracting, including with respect to any subsequent phase of this project. CONSULTANT’s participation in the planning, discussions, or drawing of project plans or specifications shall be limited to conceptual, preliminary, or initial plans or specifications. CONSULTANT shall cooperate with CITY to ensure that all bidders for a subsequent contract on any subsequent phase of this project have access to the same information, including all conceptual, preliminary, or initial plans or specifications prepared by CONSULTANT pursuant to this Scope of Services.

### **I. INTRODUCTION**

The City of Palo Alto (City) is requesting proposals from consultants to perform an update to their Long Range Facilities Plan (2012) for the Regional Water Quality Control Plant (RWQCP; Plant). The update will be known as the Long Range Facilities Plan Update (the Project). For this Project, the CONSULTANT shall provide engineering and other required services during all phases of the Project, as authorized by the City.

### **II. BACKGROUND**

#### **General**

The City owns and operates the RWQCP, which treats wastewater from a total of six partner agencies (Partners), including the City. The RWQCP has a permitted dry weather capacity of 39 million gallons per day (MGD), annual average treated flow of 16 to 18 MGD, and a wet weather capacity of 80 MGD. In 2012, a Long Range Facilities Plan (LRFP) was completed to identify the needs at the RWQCP for continued, compliant operations. To date, several of the needs identified in the 2012 LRFP have resulted in projects that have either been completed or are underway. They are as follows:

- Sludge Dewatering and Loadout Facility (completed in 2019)
- Primary Sedimentation Tank Rehabilitation and Electrical Room Upgrade (in construction and expected to be completed in June 2024)
- Secondary Treatment Upgrades (in construction and expect to be completed in June 2028)
- 12kV Power Distribution Upgrades – Phase 1 (in construction and expect to be completed in June 2024)
- 12kV Power Distribution Upgrades – Phases 2-7 (expect to issue NTP for construction in August 2024)
- Advanced Water Purification System (in design)
- Joint Interceptor Sewer Rehabilitation - Phase 1 (design completed; construction scheduled for summer 2024)

- Outfall Project (on hold)
- Headworks Replacement Project (in advanced planning)

### **Space Planning**

The existing Administration Building was originally constructed in 1975 as a recycled water process and pumping facility and subsequently expanded in 1992, 1995, and 1998 as a staff building and pretreatment lab. The existing Operations Building was originally constructed in 1972 and houses laboratory testing stations and equipment, offices, a large lunchroom, and locker rooms. Per the LRFP, the need for a new building was identified to house Operations, Administration, Engineering, Watershed Protection, IT, and Solid waste staff, as well as to provide a new laboratory. Subsequently, in 2017, RWQCP staff revisited the LRFP siting analysis which resulted in the identification of the project as a new, 2 story building which would house the laboratory, environmental services staff, and be located along the western periphery of the RWQCP (adjacent to the secondary clarifiers). Building costs were higher than budgeted and the Plant canceled the project to reevaluate alternatives.

The City also intends to construct and/or repurpose workspaces for RWQCP staff to meet future staffing levels, workspace upgrades and safety/code updates. There are several predefined workspace alternatives to be used independently or in aggregate to meet the Plant's workspace needs, including:

- Buy 1900 Embarcadero Road and remodel for some or all groups.
- Buy 2415-17 and/or 2425 Embarcadero Way, demolish existing structure and a build tech services building for some or all groups.
- Renovate and repurpose the Administration Building.
- Renovate the Operations Building for at least the Operations group.
- Build a technical services building, that includes a lab function, engineering, technology, and watershed protection groups
- Construct a "lab only" building, that includes the laboratory, laboratory appurtenant spaces, and lab staff workspaces.
- Build a "mothership" adjacent to new lab only building, consisting of Operations, Engineering, Technology, and Watershed Protection groups.
- Build a tech services building next to new lab only building, consisting of Engineering, Information Technology, and Watershed Protection Group.

The Plant's preference is for the Operations Group to remain in the existing Operations Building, provided that alternative is favorable or similar in comparison to other alternatives costs.

The workspaces need to include the programmed areas defined in Attachment B – Exhibit A (Space Needs Analysis), including:

- A primary point of entry of Plant visitors;
- An Operations staff and control room, equipped with SCADA monitoring and control system;
- Sufficient exterior space for motor vehicle parking and bike storage;
- Integrated security systems; and



- Sufficient common areas for large conferences, small meetings, meals (preparation and dining); note that the Admin Building has been repurposed for conference, training, job walk meetings with a large number of attendees, and all-hands meetings and meals; the repurposed Admin Building seems to be meeting the space planning needs the large gathering space needs without the need for these larger spaces to be placed in a more expensive new building (e.g., the former mothership concept of the prior staff building planning).

### **Biosolids Facilities Plan**

In 2014, the City developed a Biosolids Facility Plan (BFP) to evaluate and recommend a biosolids technology to replace incineration and a biosolids disposal plan for review and approval by City Council. The 2014 BFP can be found at link below<sup>1</sup>. The BFP recommendation was to construct a Phase I sludge dewatering and truck loadout facility which is now in operation. A future Phase II facility was to include anaerobic digestion facilities including thermal hydrolysis processing (THP) of biosolids followed by mesophilic anaerobic digestion (MAD) with a combined heat and power (CHP) facility to utilize the biogas. This recommendation was based on a combination of economic and non-economic factors emphasizing energy production, greenhouse gas reduction, capital cost, and life-cycle cost.

The THP/MAD/CHP alternative was further developed in a Preliminary Design Report in 2015. This report can be found at link below<sup>2</sup>. With further project definition and design development, the estimated capital cost for the selected alternative increased from \$57M to \$71M. This revised cost estimate, coupled with the complexity of operating a new THP facility, led to the decision to abandon the THP/MAD/CHP project in early 2015. The design of the dewatering and truck loading facilities proceeded in 2015 and the new facility was operational in early 2019.

Since completion of the BFP and Sludge Dewatering and Loadout Facility, there have been several new developments in the industry that warrant revisiting the previous recommendations and updating the BFP. These include:

- The City has completed the new sludge dewatering and truck load-out facility and the incinerators have been decommissioned.
- Recent legislation in California is driving new regulations that impact biosolids disposal options, organic waste management options, as well as short-lived climate pollutants (including methane) and other air emissions from wastewater treatment facilities.
- Several technologies that were nascent at the time of the BFP have advanced with recent installations and operational history in California. These include the Lystek low-temperature alkaline hydrolysis process and the Bioforcetech drying and pyrolysis process.
- A BFP 2019 update that re-evaluated long-term biosolids management and energy recovery alternatives. The ultimate outcome for the near-term was to continue hauling and treating

---

1 City of Palo Alto <https://www.cityofpaloalto.org/files/assets/public/public-works/environmental-compliance/water-quality/2010-rwqcp-master-planning/parwqcp-biosolids-facility-plan-final.pdf>

2 City of Palo Alto <https://www.cityofpaloalto.org/civicax/filebank/documents/61625>

dewatered sludge at regional treatment facilities which would handle beneficial reuse. This update can be found at link below<sup>3</sup>.

- The City has awarded a five-year contract for offsite biosolids processing. A new five-year contract will be in place by April 1, 2024 for a term of April 1, 2024 to March 31, 2029.
- The Regional Water Quality Control Board (RWQCB) has adopted a Nutrient Watershed Permit and is moving toward regulating total nitrogen in effluent discharged to the San Francisco Bay. This has led to a reassessment of the recommendations of the LRFP and the City has decided to replace the aging Fixed Film Reactor (FFR) facilities with a biological nutrient removal (BNR) process. This will result in a change in solids production rate (about 34% more WAS and 10% more total sludge) and solids quality and potential future dewatering side-stream treatment requirements.
- Wastewater flows have decreased and waste strength has increased due to water conservation measures and a drop in infiltration and inflow into sewers over the long-term.

The Biosolids Facility Plan needs to identify a layout and siting concept for near- and long-term solutions, within the Plant fence line and/or at the Measure E site, adjacent to the Plant's southeast boundary. The Measure E site is owned by the General Fund and is former parkland. If authorized by Council, the Measure E site could be used by the Wastewater Treatment Fund for a biosolids facilities process (i.e., "an environmental technology" as defined in the Measure E language). City Council has the option to rededicate some or all of the Measure E site as parkland at any time. However, this LRFP Update is an important study to help City Council decide whether it is beneficial for the City to use the Measure E site for use for a future biosolids technology, and Council is likely to defer any decisions on park rededication until completion of this study. The 2019 Biosolids Facilities Plan update only analyzed biosolids technology facilities inside the plant fenceline because the technology evaluation did not dictate the need for supplemental land. This study, at the direction of Council, will be evaluating the Measure E site in addition to land inside the plant fenceline.

### III. INITIAL PROJECT DEFINITION

A successful Long Range Facilities Plant Update will address the RWQCP key issues and meet the RWQCP long term goals.

**Key Issues** (in no particular order):

#### Schedule

- The City needs to make RWQCP layout and space planning decisions as soon as possible. The Biosolids Facility Plan Update and the Workspace Planning tasks need to occur first and findings from these tasks need to be used by the City before the conclusion of the complete Long Range Facility Plan Update.
- Existing Conditions and Capital Improvements:
  - **Project Location:** The RWQCP is located within a flood plain, adjacent to the San Francisco Bay, a baylands park, a closed landfill, and an active airport. Associated conditions, including but not limited to, flooding, sea level rise and related rising

---

3 City of Palo Alto [https://www.cityofpaloalto.org/files/assets/public/public-works/water-quality-control-plant/sludge-dewatering-building/finaldraft\\_palo\\_alto\\_bfp\\_update.pdf?t=47012.05](https://www.cityofpaloalto.org/files/assets/public/public-works/water-quality-control-plant/sludge-dewatering-building/finaldraft_palo_alto_bfp_update.pdf?t=47012.05)

shallow groundwater conditions (see City of Palo Alto Sea Level Rise Vulnerability Assessment section 8.2.5.2 for anticipated inundation and depth to groundwater changes in future decades, and Sea Level Rise Adaptation Policy at [www.cityofpaloalto.org/sealevelrise](http://www.cityofpaloalto.org/sealevelrise)), miscellaneous fill, young bay mud, and temporary and permanent facility height restrictions need to be considered.

- The RWQCP is located adjacent to light-industrial and commercial properties. Temporary and permanent aspects of the Project implementation, including traffic, noise, dust and odors need to be anticipated and mitigated.
    - The RWQCP is located over “bay mud” and miscellaneous fill. Geotechnical investigations are required to understand soil conditions and seismic criteria. All current Capital Improvement Plans (CIPs) utilize deep, drilled piles as part of the foundation system for structures, including equipment pads.
  - **Reliability:** The RWQCP is critical infrastructure, required to be staffed and operate through extreme events and future conditions (including anticipated sea level rise, changing shallow groundwater conditions, and potential 100-year flood event; seismic events, and mechanical and power failures) with minimal impacts.
  - **Costs:** The Plant needs to understand the initial and long-term costs associated with proposed improvements and the costs/risks of no improvement alternatives to ensure the best value for the Partners is programmed.
  - **Project Prioritization and Sequencing:** To the greatest extent possible, the City needs to understand its infrastructure’s risk of failure and consequence of failure. Capital improvement projects need to be developed to minimize infrastructure failure harming public health, property, and the environment. Consideration also needs to be given to the space and resources available to complete projects and the logical sequencing of related projects (related by process or related by area). Projects should be phased as needed to align with resources, including funding.
  - **CIP Constructability:** Staging, laydown, and parking constraints need to be considered when defining projects.
- **Identification and Allocation of Costs**
    - **Operations and Maintenance Costs:** To ensure fair cost allocations to the Partners of the Plant based on flow and strength components of the wastewater, the City needs to understand the total cost components of its reoccurring services, including administration, operations, maintenance, and contractor/vender services.
    - **Capital Cost (Debt) Shares:** The City assigns to each Partner a proportion of the capital costs associated with each major project. The City needs to review their existing methodology for assigning costs and to evaluate alternative methodologies. The City favors a methodology that is fair, transparent, and appropriately detailed.
  - **Spatial Considerations:** The Plant has had the same property line and footprint since 1972. Over that time, the Plant has utilized the available footprint to adapt to its operations and infrastructure to meet community and regulatory drivers; the Plant has expanded its wastewater treatment capacity and recycled water production, reduced its onsite air emissions, and improved effluent water quality. The fixed footprint has made it challenging to implement capital improvement projects and major maintenance activities while meeting all the Plant’s high standards and regulatory requirements (e.g., issues with staging,

laydown, parking, and maintenance of screening and buffer lands). The Plant may have the opportunity to acquire adjacent properties and relocate some Plant staff groups outside the existing Plant footprint. The Plant needs to understand and quantify the benefits/opportunities of acquiring a new property. A significant part of the consideration is the planning-level costs for the several building construction and renovation alternatives, listed in Task 3.

- **Biosolids Facilities and Management:** Due to the changing disposal requirements and evolving opportunities and technologies, the City needs to again update their Biosolids Facility Plan (BFP). The plan, Biosolids Facility Plan Update, needs to: evaluate biosolids disposal options, onsite treatment opportunities, and opportunities for regional partnerships; identify improvement projects required at the Plant and associated estimated costs and greenhouse gas emissions; and identify planning level layout(s) and space requirements. The BFP Update needs to include a 30-year planning horizon.

#### **Long Term Goals** (in no particular order):

Prior to the 2012 Long Range Facility Plan, a long-term Goals Study was conducted with extensive input from the community, other stakeholders, and Plant staff. That effort identified 18 goals to guide RWQCP activities. Fundamentally, the long-term goals remain the same and are the basis for the Long Range Facilities Plan Update. The long-term goals for the RWQCP are listed below.

- Meet Future Capacity Needs
- Meet or Exceed Regulatory Requirements
- Minimize or Eliminate Toxins in the Influent
- Minimize Energy Consumption and Maximize Energy Life Cycle Efficiency
- Minimize or Eliminate Potentially Hazardous Chemical Usage
- Minimize or Eliminate Total Release of Toxins to the Environment
- Minimize Impact on Ecosystem
- Minimize Impacts on Community, Including Neighboring Communities
- Minimize or Justify Financial Impacts on Ratepayer
- Involve Stakeholders in the Decision-Making Process
- Immobilize or Beneficially Reuse Persistent Toxins
- Take Leadership Role in Promoting Beneficial Reuse and Environmental Enhancement
- Maximize Worker Safety
- Maximize Recycled Water as a Supplemental Water Source
- Minimize the Plant's Lifecycle Greenhouse Gas Emissions
- Address Climate Change, Sea Level Rise and Changing Shallow Groundwater Conditions
- Minimize Recycled Water Salinity

#### **IV. CONSULTANT SCOPE OF SERVICES (BASIC SERVICES)**

The CONSULTANT's scope of work shall include the tasks described in the following sections. The CONSULTANT shall not perform work on a task prior to an explicit approval by the City to proceed with work for that specific task.

City anticipates the CONSULTANT's work to proceed as follows with adjustments as needed by the CONSULTANT where mutually agreed to with the City:

Step 1: Update population and load projections for new planning horizon (50-year) (Task 4)

Step 2: After Step 1, Specific Facilities Plans for Workspaces and Biosolids

1. Workspace Planning Facilities Plan (Task 3)
2. Biosolids Facility Plan Update (Task 2)

Step 3: In parallel with Step 2

1. Cost of Service Assessment for Operating and Capital Cost Allocations (Task 7)

Step 4: After Step 1 and parallel or after Steps 2 & 3, investigate existing RWQCP condition and process needs (Task 5)

Step 5: After Step 4, Key assessments of capital assets and site planning (Task 6)

Step 6: After Step 5, Updating recommended projects and prioritization list with new Association for the Advancement of Cost Engineering (AACE) Class 5 estimates (Task 8)

## **Task 1 – Project Management**

### **Task 1.1 – Invoicing/Project Controls**

Provide necessary administration, project controls, quality assurance and professional oversight of the Project and the CONSULTANT's subconsultants to ensure the Project remains on schedule, remains within budget, maintains continuity of information, and satisfies the requirements of the CONTRACT.

Prepare and distribute a Project Management Plan (PMP) for City's record. Within the PMP, include the baseline schedule, budget, spending projection, contacts/subcontracts and procedures. Include a Project Directory with roles and contact information and a Quality Assurance and Quality Control Plan.

Prepare and submit monthly invoice packages to the City. Billing period shall include the full calendar month and not overlapping two separate Fiscal years (i.e., not to combine June and July invoices). If reimbursable incurred, include a summary table listing the subject matter/ personnel name, date, purpose and associated expenses; label each receipt with a numerical number. Include a progress report with invoices to document progress. Provide progress updates for each task on the sub-task level, the budget status (authorized amount, current billing, billed to date, previously billed, amount remaining, and percent spent), an earned value analysis chart, a list of outstanding issues and potential changes, a project schedule status and schedule concerns. Identify and mitigate potential budget overruns and schedule changes.

Prepare, maintain, and update the status of Project schedule for City's review and comments. Prepare Project schedule status monthly with the Progress Report. Identify and mitigate schedule changes.

## **Task 1.2 – Kick-Off Meeting**

Facilitate a hybrid (in-person/virtual) meeting at the initiation of the Project (Kick-Off Meeting), with the City Project Manager and City staff to discuss overall project coordination, data collection, and project schedule. Walk the Project site. Provide meeting attendees with an agenda seven (7) calendar days in advance of the date of the meeting. Provide meeting attendees with summary minutes and electronic copies of any supplemental materials used during the meeting no later than fourteen (14) calendar days from the date of the meeting.

## **Task 1.3 – Project Progress Meetings**

Conduct virtual (via phone or web conference services) Project Progress Meetings with City Project Manager, twice a month. The frequency of Project Progress Meetings can be decreased at the City's discretion.

### ***Deliverables:***

- Draft and final Project Management Plan.
- Baseline project schedule with milestones.
- Agenda and minutes for kick-off meeting.
- Monthly invoices, including monthly Progress Reports.

### ***Assumptions:***

- The kick-off meeting will be attended by up to five Carollo staff and up to two Jacobs staff. The kick-off meeting will be a hybrid meeting, with some staff attending in person and others attending virtually and will have a 2-hour duration. In-person attendees will walk the project site after the kick-off meeting.
- Project progress meetings will be attended by up to two Carollo staff and one Jacobs staff. Meetings will be virtual and have a 1-hour duration.
- Quality assurance and professional oversight of Project tasks will be performed under individual task budgets.
- All deliverables will be provided in electronic format.

## **Task 2 - Biosolids Facility Plan (BFP) Update**

### **Task 2.1 - Update Background Information**

The RWQCP currently co-thickens primary sludge and WAS in gravity thickeners and dewatered thickened sludge in belt filter presses. Dewatered cake is hauled for offsite processing by Synagro and Lystek.

Collect up to 5 years of available data on current solids (primary sludge, WAS, thickened WAS and primary sludge, and dewatered cake) quantities and characteristics (flow, total solids concentration, volatile solids concentration). Assess gravity thickener and belt filter press current operations (operating schedule, duty/standby units), process performance (hydraulic and solids loading rates, polymer dose, solids capture rate, and thickened and dewatered solids concentration).

Assess current solids handling operating costs (power use, polymer use, operations and maintenance labor, equipment maintenance) and end-use costs to establish the baseline “do-nothing” solids processing alternative.

Review previous biosolids evaluations including the 2012 Long Range Facilities Plan, the 2014 Biosolids Facility Plan, and the 2019 Biosolids Facility Plan Update.

Develop draft BFP update priorities and evaluation criteria and methodology to be used in the biosolids alternatives screening and evaluation. The evaluation criteria and methodology used in the 2019 Biosolids Facility Plan Update will be used as a starting point for this BFP Update; CONSULTANT will review and modify as needed, with input from the City.

Conduct a kickoff workshop with Plant staff to review and confirm the draft BFP Update priorities, evaluation criteria and methodology, the current solids quantities, the current solids processes performance, and current solids handling and end-use costs. Draft a BFP Update Background and Introduction Technical Memorandum (TM) for the City’s review and comment. Incorporate City’s comments in the final BFP Update Background and Introduction TM.

## **Task 2.2 – Develop Baseline Solids Projections**

The BNR/MABR secondary treatment upgrades, projected to be in service in 2028, are expected to result in a substantial change in solids production rate (about 34% more WAS and 10% more total sludge). This change in solids production rate and primary sludge to WAS ratio is expected to affect the gravity thickening and belt filter press dewatering performance.

The BFP Update will be based on a 30-year planning horizon. CONSULTANT will use the primary sludge and WAS loading projections (pounds per day) and volatiles solids concentrations (%VS) from the BioWin model developed in Task 4.3 and thickening and dewatering process performance assumptions to develop annual average and maximum month solids projections (primary sludge, WAS, thickened primary sludge and WAS, and dewatered cake) for use as the basis of sizing potential future solids processing facilities and off-site management options. CONSULTANT will use the existing thickening and dewatering performance criteria from Task 2.1 as a baseline and modify them based on expected changes in performance criteria from the BNR/MABR upgrades.

## **Task 2.3 – Regulatory Requirements and Trends**

Review regulatory review chapters of previous biosolids evaluations including the 2012 Long Range Facilities Plan, the 2014 Biosolids Facility Plan, and the 2019 Biosolids Facility Plan Update.

Review current and expected future regulations, including:

- Federal, state, and local regulations applicable to existing and potential future solids processing and beneficial reuse.
- Regulations on short-lived climate pollutants (Senate Bill 1383) and emerging contaminants of concern: plastics/microplastics and PFAS.
- Regulations relating to air emissions from digester gas treatment, flares, boilers, cogeneration, drying, and gasification/pyrolysis (since alternatives to be evaluated in Tasks 2.4 and 2.5 may include anaerobic digestion and thermal processes).

- Regulations on sea level rise and related shallow groundwater change adaptation, as applicable.

Conduct a Basis of Planning workshop with Plant staff to review the solids projections developed in Task 2.2 and the regulatory requirements and trends developed in Task 2.3. Draft a Regulatory Requirements and Trends TM for the City's review and comment. Incorporate City's comments in the final Regulatory Requirements and Trends TM.

#### **Task 2.4 - On-Site Solids Processing and Off-site Management Alternatives Screening**

Evaluate potential on-site solids processing and off-site management alternatives. CONSULTANT will review the alternatives developed in the previous biosolids evaluations including the 2012 Long Range Facilities Plan, the 2014 Biosolids Facility Plan, and the 2019 Biosolids Facility Plan Update.

On-site solids processing alternatives may be sited at the Measure E site, immediately adjacent to RWQCP (see staff report below for more information)<sup>4</sup>. The City Council has authorized that the Measure E site can be used as a potential future biosolids processing facility. Evaluate the latest developments for established and emerging technologies. Potential on-site solids processing alternatives include:

- MAD (mesophilic anaerobic digestion) with recuperative thickening
- TAD (thermophilic anaerobic digestion)
- TPAD (Two-Phase Anaerobic Digestion)
- MAD with THP (Thermal Hydrolysis Process)
- Low Temperature Alkaline Hydrolysis (Lystek International, Inc.)
- Drying / Pyrolysis (Bioforcetech Corporation; Aqualine)
- Gasification (this alternative is expected to be eliminated due to need for wood chip addition)
- Thermal Drying
- Greenhouse Solar Drying

CONSULTANT will take into consideration the possibility of using mechanical thickeners (such as rotary drum thickeners) immediately downstream of the gravity thickeners or blend tank to increase the solids concentration and reduce the required downstream biosolids facility footprint. CONSULTANT will evaluate expected impact of digestion on downstream dewatering performance.

Coordinate with the City to develop a list of up to five (5) off-site management alternatives for the City of Palo Alto. Off-site alternatives may be speculative. Potential off-site management alternatives include:

- San Jose WPCP Public Private Partnership (P3) imported feedstock opportunity

---

<sup>4</sup> City of Palo Alto, April 3rd, 2023, SR 2303-1145 <https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/reports/city-manager-reports-cmr/2023/sr-2302-0942.pdf>



For each on-site and off-site alternative, evaluate high-level advantages, disadvantages, recent installations, relative greenhouse gas (GHG) emissions (including for the processes and required trucking/hauling), and relative capital and operations and maintenance (O&M) costs. For greenhouse solar drying and other large footprint alternatives, estimate footprint requirements to determine if there is sufficient space at the RWQCP and Measure E site for these processes.

Conduct an On-Site and Off-Site Solids Alternatives Screening Workshop with City staff. At the workshop, use the screening evaluation criteria and methodology established in Task 2.1 to screen the options down to up to five (5) alternatives for alternatives development and analysis (“selected alternatives”).

### **Task 2.5 - Alternatives Development and Evaluation**

Develop the selected alternatives identified under Task 2.4. Focus on a comparative evaluation and identify major differences between alternatives that align with the evaluation criteria identified in Task 2.1. Develop planning-level capital and life-cycle cost estimates and non-economic evaluations. Evaluate compliance with and flexibility to meet anticipated future regulatory requirements. Develop quantitative GHG emissions. Include in the GHG analysis the changing regulatory landscape that requires future sludge hauling trucks to be electric by 2036; evaluate hauling GHG emissions for two scenarios: current diesel trucks and future electric trucks.

Consider the spatial requirements of the selected alternatives and prepare a preliminary site layout plan for each, including trucking routes. Include required appurtenances for each alternative. Provide key parameters for each alternative, including height, area, and operations and maintenance areas.

Draft an Alternatives Development and Evaluation TM for the City’s review and comment. In addition to documenting the findings of this task, include a description of the solids projections developed in Task 2.2 and of all alternatives considered and the basis for the initial screening conducted in Task 2.4. Conduct an Alternatives Development and Evaluation workshop. Incorporate City’s comments in the final Alternatives Development and Evaluation TM.

The City has determined that alternatives involving food waste receiving, microturbines, fuel cells, compressed biogas vehicle fueling and compressed biogas for pipeline injection will not be included in the evaluation.

### **Task 2.6 - Recommended Biosolids Alternatives(s)**

Collaborate with the City to identify a recommended biosolids alternative. If the preferred alternative is speculative, also provide a non-speculative recommended biosolids alternative.

For the recommended biosolids alternative(s), develop:

- Process flow diagram
- Nutrient removal strategy (including struvite, side-stream treatment)
- Ancillary facility requirements
- Preliminary site layout and square footage / acreage requirements
- Constructability issues
- Beneficial reuse and final disposition of residuals

- Estimated capital costs
- Estimated operations and maintenance (O&M) costs
- Estimated GHG emissions
  - For trucking alternatives, consider emissions for both diesel and electric vehicles
- Risk management and mitigation strategy

Develop a draft Recommended Biosolids Alternative(s) TM detailing the recommended alternative(s). Conduct a Recommended Biosolids Alternative(s) Workshop. City's review comments on the draft Recommended Biosolids Alternatives TM will be incorporated into the final Recommended Biosolids Alternatives TM.

Prepare a slide deck of technical support materials and exhibits for future City Council and partner agency presentations, detailing the BFP Update findings and recommendations. Target a 20-minute length of presentation. Incorporate two cycles of City's review comments.

### **Task 2.7 - Biosolids Facility Plan Update**

Provide a draft Biosolids Facility Plan Update, compiling the TMs developed in the preceding subtasks. The BFP Update will include an Executive Summary of the findings, conclusions, and recommendations. Conduct a workshop to review and discuss the draft BFP Update with City Staff. Incorporate City's comments and provide a final BFP Update.

#### ***Deliverables:***

- Agenda, materials, and minutes for all workshops:
  - BFP Kickoff
  - Basis of Planning Workshop (covering solids projections and regulatory requirements and trends)
  - Biosolids Alternatives Screening Workshop
  - Alternatives Evaluation Workshop
  - Recommended Alternative(s) Workshop
  - BFP Update Review Workshop
- BFP Background and Introduction TM, draft and final versions.
- Regulatory Requirements and Trends TM, draft and final versions.
- Alternatives Screening and Evaluation TM, draft and final versions and comment log.
- Recommended Biosolids Facilities Alternative(s) TM, draft and final versions and comment log.
- Biosolids Facility Plan Update, draft and final versions, and comment log
- Recommended Biosolids Facilities Alternative(s) presentation materials for future City Council and partner Agency presentations, two drafts and one final version.

#### ***Assumptions:***

- Workshops will be attended by up to five Carollo staff and up to three Jacobs staff. Workshops will be virtual and have a 2-hour duration.
- Cost estimates will be developed consistent with AACE Class 5.
- All deliverables will be provided in electronic format.

### **Task 3 - Workspace Planning**

#### **Task 3.1 – Confirmation of RWQCP’s Workspace Vision, Needs and Constraints**

Review background information including preliminary design documents, record drawings, LRFPP and other available documentation to understand site constraints and initial space and area requirements for Plant staff. Review of the background information will focus on the following:

- Sites for new or leased buildings located off the Plant site that were identified in the RFP.
- Existing Administration building.
- Existing Operations Building

Conduct a kickoff meeting and up to two follow-up meetings to confirm and finalize the vision/purpose/uses, the requirements/restrictions for siting the facilities, by Group (up to three meetings total).

CONSULTANT will summarize the updated vision/purpose/uses, space and needs requirements in a TM (Vision, Needs and Constraints TM, draft and final) to define the program requirements for the Plant’s workspaces and related facilities.

#### **Task 3.2 – Workspace Concept Development and Evaluation**

Develop a series of initial workspace concepts for Plant workgroups, excluding Operations and Maintenance workgroups. Each concept will either be a standalone predefined workspace alternative or a combination of the predefined workspace alternatives. Provide a short narrative describing the concept and planning level capital cost estimates. Conduct a workshop to review the initial concepts with the City, characterize the potential advantages and disadvantages, and screen the series of initial concepts to result in up to three favorable concepts.

Develop the three favorable concepts, as determined by the City, including site layout schematics, schematic building elevations, other graphical representations (e.g., adjacencies), and planning level costs. Conduct a workshop to present the two favorable concepts, refine the associated advantages and disadvantages, and solicit City feedback to select one preferred concept.

Develop a draft Workshop Concept Development and Evaluation TM detailing the initial workshop concept screening, the three favorable concepts, the planning-level project life-cycle costs, key long-lead considerations (e.g., land acquisition, permit requirements) and findings (the preferred concept). Provide a discussion on the possible ways to phase alternatives to incrementally meet the City’s needs over the planning horizon. Collaborate with the City to identify a recommended alternative. Incorporate the City’s comments on the draft TM, workshop, and presentations in the final Workshop Concept Development and Evaluation TM.

Prepare technical support materials and exhibits for City Council and partner agency presentations. Target a 20-minute length of presentation. Incorporate two cycles of City’s review comments.

### **Task 3.3 – Preliminary (10%) Design for Rehabilitation of Existing Buildings**

Reference record drawings, visit the site, and review available documentation to understand site constraints, existing building layout, and geotechnical conditions for the existing (1) Administration Building and (2) Operations Building.

- **Operations Building:**
  - Develop two layout alternatives drawings to accommodate the Operations Group, SCADA/Control room, SCADA Development Cubicle/Area, and upgraded Server room on second floor, bathroom/change room/mud room and locker room on first floor, and a kitchen/lunchroom.
  - In collaboration with the City, select a layout for the 10% design of the rehabilitation.
- **Administration Building:**
  - Develop two layout alternatives to accommodate a multipurpose space that can be utilized as a large meeting/gathering area for all-hands meetings, project pre-bid or pre-proposal conferences, trainings, community outreach meetings, as well as a private office, SCADA Development work area and miscellaneous training and tour sessions.
  - Note that the Administration Building will be for common spaces only (no programmed workgroup areas).
  - In collaboration with the City, select a layout for the 10% design of the rehabilitation.
- **For both buildings, develop a 10% Design Package:**
  - Develop the design criteria for the building and identify major elements of the rehabilitation required to meet applicable codes (e.g., seismic upgrades, sea level rise adaptation).
  - Identify major building support systems requiring upgrades (e.g., HVAC) during buildings' design life.
  - Update the project life cycle costs and project implementation schedule.
  - Identify any data gaps that will require additional, future investigations.
  - Develop 10% design drawings.

Conduct a workshop to present the 10% Design Package and solicit City feedback. Incorporate City's comments from the draft design package and workshop in the final design package.

#### ***Deliverables:***

- **Agenda, materials, and minutes for all workshops and meetings:**
  - Vision, Needs and Constraints Kickoff Meeting.
  - Up to two additional Vision, Needs and Constraints Meetings.
  - Workspace Concepts Screening Workshop.
  - 10% Design Review Workshop.
- **Vision, Needs, and Constraints TM, draft and final versions.**
- **Workshop Concept Development and Evaluation TM, draft and final versions and comment log.**

- Workspace Planning presentation materials for future City Council and partner agency presentations, two drafts and one final version.
- 10% Design Package for Operations Building and Administration Building rehabilitations, draft and final versions and comment log.

***Assumptions:***

- Workshops will be hybrid (in person and virtual) and attended by up to three Jacobs staff (in person) and one Carollo staff (virtually). Workshops will have a 2-hour duration.
- All deliverables will be provided in electronic format.
- Cost estimates will be developed consistent with AACE Class 5.
- New workspace construction should have a minimum design life of 50 years.
- Renovated workspaces need to include life-cycle costs to have comparable useful life as new workspace construction.

**Task 4 – Background and Baseline Information**

**Task 4.1 – Wastewater Flow and Load Projections**

Collect and summarize up to 5 consecutive years of Plant influent wastewater flows and characteristics. Determine the historical Average Day Dry Weather, Average Day Wet Weather, Maximum Month, and Peak Day Wet Weather flow and load conditions.

Develop population forecasts and expected per capita wastewater flows and loads for each Partner Agency in coordination with Partners' planning efforts. These forecasts will consider the following information from the Partners:

- urban water management plans
- census data
- ABAG projections
- sewer master plans
- planning department projections
- other population projections formally adopted by each Partner Agency

Population forecasts and per capita wastewater flow and load projections will also be informed by a questionnaire developed by the CONSULTANT to determine each Partner Agency's expected 2075 flow and load projections for City's review and distribution. CONSULTANT will compile and analyze questionnaire responses, attend up to six (6) City coordinated meetings with each Partner Agency, and compile meeting information.

Based on historical flows and loads, population forecasts, and expected flow and load projections for each Partner Agency, develop Average Day Dry Weather, Average Day Wet Weather, Maximum Month, and Peak Day Wet Weather flows and loads for the year 2075.

**Task 4.2 – Recent and Ongoing Plant Improvements**

Summarize the major and minor capital improvements completed and underway at the Plant since the 2012 Long Range Facilities Plant. Perform one (1) site visit and meet with Plant staff to verify

equipment rating of critical equipment, as needed. CONSULTANT shall not rely solely on record information. Based on record information and site verification of critical equipment rating, CONSULTANT will summarize the design criteria of the current and planned facilities, to be used in Task 4.3.

#### **Task 4.3 – Process Modeling, Capacity Assessment, and Solids Projections**

The City will provide the EnviroSim Associates BioWin process model to the CONSULTANT to use. The process model was developed by Brown & Caldwell after completion of the Secondary Treatment Upgrade project design. The CONSULTANT will use the wastewater flow and load projections developed in Task 4.1 and the design criteria for recent and ongoing plant improvements developed in Task 4.2 to update the process model, as needed.

CONSULTANT will use the model to develop primary sludge and waste activated sludge (WAS) loading projections for the 30-year planning horizon to be used in Task 2 (Biosolids Facility Plan Update). These primary sludge and WAS load projections will be based on the Plant's planned treatment process.

CONSULTANT will conduct a capacity assessment of existing Plant processes based on the 2075 projections developed in Task 4.1 and the design criteria determined in Task 4.2. CONSULTANT will compile a matrix of all major treatment processes and their capacities. Based on the capacity assessment, CONSULTANT will identify capacity limitations and capacity-driven expansion needs over the next 50 years. CONSULTANT will allocate capacities by Partner Agency allocation, according to the information tabulated in Task 7.2 and compare allocated Partner capacities with future projections to identify exceedances.

The updated BioWin simulator inputs and results will be shared with the City for future use.

#### **Task 4.4 – Regulatory, Environmental and Community Constraints**

Review Plant's current NPDES permit. Conduct a workshop with the Plant's Regulatory Group staff to discuss current and potential future regulatory requirements. This task will include the following topics:

- Current and Potential Future Regulatory Requirements
  - Monitoring and Effluent Water Quality
  - Air Emissions Quality (except for potential future biosolids processes, which will be covered in Task 2.3)
  - Environmental Compliance Laboratory TNI Requirements
  - Pretreatment
- Community Goals and Concerns
- Regional Trends, Studies, and Opportunities
- Emerging Contaminants of Concern (specifically, ones that could require a project or change in Plant operations during the planning horizon)

#### **Task 4.5 - Development of Evaluation Criteria and Methodology**

Develop the criteria for the evaluation of existing infrastructure and potential improvements. The evaluation criteria and methodology used in the 2012 LRFP will be used as a starting point for this

LRFP Update; CONSULTANT will review and modify as needed, with input from the City. Evaluation criteria may include:

- Planning-level capital, operational, and maintenance cost (including life cycle costs)
- Estimated staffing requirements/costs
- Redundancy, reliability, and longevity
- Ease of operation and safety
- Ease of maintenance
- Modifiable – to increase capacity, link with a process change, etc.
- Environmental considerations: e.g., release of nitrogen to the bay, etc.
- Carbon footprint minimization, especially through in-plant energy use reduction and energy recovery
- Impacts on adjacent land uses (e.g., visual, odors, height, noise, traffic, etc.)
- Treatment capacity and physical size, layout, footprint, and elevation impacts
- Performance and usage history
- Risk Factor (determined by Risk of Failure and Consequence of Failure)
- Constructability

Recommend a weighting/prioritization of criteria, or an alternative evaluation methodology. City to approve of final methodology.

Draft a Basis of Planning TM summarizing the findings from Tasks 4.1 to 4.5 for the City's review and comment. Incorporate City's comments in the final Basis of Planning TM.

***Deliverables:***

- Partner Agency's flow and load questionnaire, draft and final versions.
- Agenda, materials, and minutes for all workshops/ meetings:
  - Flow and Load Projections, Recent Plant Improvements, and Regulatory and Community Constraints Workshop.
  - Evaluation Criteria and Methodology Workshop.
  - Capacity Limitations and Recommended Projects Workshop.
- Basis of Planning TM, draft and final versions.

***Assumptions:***

- The site visit to confirm capacity information will be attended by up to three Carollo staff.
- Workshops will be attended by up to four Carollo staff. Workshops will be virtual and have a 2-hour duration.
- All deliverables will be provided in electronic format.

**Task 5 – Existing Plant Infrastructure and Process Assessment**

**Task 5.1 – Desktop Analysis**

Perform a desktop analysis of existing Plant infrastructure and assess the current processes (listed below). Use industry guidelines, project team experience, and City staff input to establish expected useful life estimates by classification. Install date and equipment and asset size/capacity information to be provided by the City to support the desktop calculation. Where data is lacking

or insufficient, approximate install date from record drawings for original construction and from upgrade/expansion projects. Note the age, capacity, and estimated remaining useful life of the subject infrastructure in a TM. Identify data gaps in the desktop analysis, make recommendations for infrastructure in need of field condition assessment (investigations), and prepare a draft Field Investigations Plan.

- Onsite Infrastructure
  - Dual Media Filters
  - Secondary Clarifiers
  - Yard Piping
  - Recycled Water Facilities
  - W4 (Plant Water) Pumps and Power Distribution
  - Electrical Facilities
  - Hazardous Material Storage Facility
  - Compressed Air System (compressors and lines)
  - Gravity Thickeners
  - Equipment Room
  - Warehouse
  - Chlorine Building
- Offsite Infrastructure
  - Adobe Creek saltmarsh pump
  - Golf course recycled water pipeline and pump station
  - Joint Intercepting Sewer (60" / 72" diameter)
    - Pipeline Analyses
    - Metering Station
    - Approximately 2,364 feet out of 9,000 linear feet of the joint intercepting sewer closest to the Plant will be rehabilitated (via CIPP) in summer 2024.
    - Future rehabilitation of the remaining and upstream portions of the Joint Intercepting Sewer.
    - Flow Meters

Conduct a workshop with Plant staff to review the draft Desktop Analysis TM and the draft Field Investigations Plan and to coordinate investigations with Operators. Incorporate the City's comments from the workshop and the draft Field Investigations Plan in the final Desktop Analysis TM and Field Investigation Plan.

## **Task 5.2 – Sea Level Rise and 100-Year Flood Adaptation**

The CONSULTANT will review the following reference documents to identify paths forward to improve plant's resiliency against sea level rise and 100-year flood events:

- City of Palo Alto Sea Level Rise Adaptation Policy (March 2019)<sup>5</sup>

---

<sup>5</sup> City of Palo Alto. 2019. Sea Level Rise Adaptation.

[https://www.cityofpaloalto.org/files/assets/public/v/1/sustainability/sea-level-rise/slr-adaptation-policy\\_web.pdf?t=71340.78](https://www.cityofpaloalto.org/files/assets/public/v/1/sustainability/sea-level-rise/slr-adaptation-policy_web.pdf?t=71340.78)



- City of Palo Alto Sea Level Rise Vulnerability Assessment (June 2022)<sup>6</sup>
- The Plant's LiDAR topography.

Based on the references, the Consultant will identify the projected flood elevation in the short-term (2030), mid-term (2050), and long-term (2100). The consultant will identify key sea level rise and flood criteria, including sea level rise elevation, flood depth, and inundation duration with City staff. The Consultant will interview staff and analyze previous Plant CIP projects to understand the current timeline of equipment replacement and the cost premium of raising assets as they reach the end of their useful life, as well as the potential long-term impacts to site access under this strategy.

The CONSULTANT will develop at least three alternatives for adaptation of the RWQCP over the planning horizon. Adaptation strategies included in these alternatives shall consider the feasibility, economic impacts, and environmental consequences of various mitigations that may include both natural and engineered adaptation alternatives and/or operational changes, including raising the foundation of critical equipment as they reach the end of their useful life; installing flood doors for existing building; and/or constructing a perimeter flood wall. The Project study area shall focus on City-owned infrastructure located within the boundaries of the RWQCP but shall also consider site access routes under future conditions. The CONSULTANT will collaborate with City staff through workshop(s) to review and finalize the measures to be included in each alternative.

Based on the final alternative concepts, the CONSULTANT will then develop a cost estimate and qualitative cost-benefit analysis of each potential alternative, highlighting the recommended alternative, based on long-term costs of implementation, assuming no outside funding. The CONSULTANT will develop a reasonable implementation schedule for each alternative. Develop a 50-year timeline for each alternative, indicating the percentage of the Plant's assets that would be protected each year, based on the projected flood elevations. Assume that no regional solutions (regional levee) are implemented during the subject period. For all alternatives:

- Estimate the conditions and assumptions that would be required to operate the Plant during an inundation event (if operation is possible).
- Estimate the impact inundation would have on the Plant's ability to receive, treat, and properly discharge the Plant influent.
- Estimate the extent of damage, including cost impact, to City's asset for baseline condition (do nothing) and for each alternative.
- Estimate the requirements to bring the Plant back to fully operational following an inundation event.
- Estimate the cost to implement each alternative using a present worth analysis.

Facilitate a workshop to present the analysis to City staff. Based on the results of the workshop, the CONSULTANT will prepare a Climate Adaptation Plan TM. The TM will summarize the recommended climate adaptation requirements, detail the potential alternatives for meeting the Plant's requirements, and include graphics/figures for each alternative, including mapping of projected inundation areas at the planning horizons and the alignment and elevation of any

---

<sup>6</sup> City of Palo Alto. 2022. Sea Level Rise Vulnerability Assessment.

<https://www.cityofpaloalto.org/files/assets/public/v/1/public-works/environmental-compliance/sea-level-rise/palo-alto-sea-level-rise-vulnerability-assessment-june-2022-062822-linked-final.pdf>

protective measures considered. Provide the City staff two drafts for comments. For each draft log and respond to comments. Prepare a final TM.

### **Task 5.3 – Field Investigations**

Following the City’s explicit approval, execute the Field Investigations Plan. Coordinate, oversee, manage, and provide the services required to assess the condition and capacity of existing infrastructure. Based on the findings from the desktop analysis (Task 5.1) and the field investigation results, develop a list of recommended improvements to be implemented over the next 50 years.

Submit a draft TM describing the field investigation methods, findings, and recommended improvements from the field investigation results. Conduct a workshop with Plant staff to review the findings from the field investigations and associated recommended improvements. Incorporate the City’s comments from the workshop and the draft Field Investigation Findings TM in the final Field Investigation Findings TM.

#### ***Deliverables:***

- Agenda, materials, and minutes for all workshops:
  - Sea Level Rise and Flood Criteria Workshop
  - Climate Adaptation Alternatives Screening Workshop
  - Climate Adaptation Alternatives Evaluation and Recommended Alternative(s) Workshop
  - Desktop Analysis Findings and Field Investigations Plan Workshop.
  - Field Investigations Plan Findings and Recommended Improvements Workshop.
- Climate Adaptation Plan TM, two drafts and final versions.
- Desktop Analysis TM, draft and final versions.
- Field Investigations Plan, draft and final versions.
- Field Investigation Findings TM, draft and final versions and comment log.

#### ***Assumptions:***

- Field investigations will be performed by up to five Carollo staff and up to five Jacobs staff.
- Workshops will be attended by up to five Carollo staff and up to three Jacobs staff. Workshops will be virtual and have a 2-hour duration.
- All deliverables will be provided in electronic format.

### **Task 6 – Identification, Evaluation, and Recommendation of Alternatives/Improvements**

#### **Task 6.1 – Draft Recommended Improvements**

Compile the recommended improvements from Tasks 2, 3, 4, and 5 into a comprehensive draft list of foreseeable capital improvement projects to be implemented over the next 50 years. For reference, below is an initial list of anticipated projects. Additional projects shall be identified by the CONSULTANT based on their findings from Tasks 2, 3, 4, and 5.

- Secondary Process

- Clarifier Equipment Enhancements (e.g., Passavant hydrograv Adapt System; flocculation)
  - Clarifier Reconfiguration (e.g., square to round; deeper)
  - 7th Clarifier (planning)
  - Selective WAS Thickening
  - RAS Lines
  - MABR (second phase of implementation)
- Filtration Process
  - Dual Media Filter Rehabilitation or Replacement
- Electrical Distribution
  - Arc Flash Study
- Recycled Water System
- Warehouse
  - Expansion (Identify whether additional storage space is needed for projected future construction projects.)
  - Improvements (e.g., controlled facility, security, climate controls)
- Workspaces
  - Align with conclusions from Task 3, as applicable
- Repurposing and Recovery of Retired Process Area
  - Fixed Film Reactors (Superstructure will be decommissioned following completion of Secondary Treatment Upgrades Project in 2028. Note that City is interested in evaluating whether the decommissioned fixed film reactors' structure can be used as warehouse storage or as space for future treatment process.)
  - Incineration Building
  - Chlorine Building
- Gravity Thickeners
- Biosolids Facilities
  - Align with conclusions from Task 2, as applicable
- Miscellaneous
  - Recycle water line replacement
  - Hypochlorite tank and appurtenances replacement
  - Low voltage and communication system improvements (including fiberoptic network and public address system improvements)

Conduct at least two workshops with Plant staff to review and amend the project list. For each project, determine with the City if an evaluation of alternatives (e.g., technologies; location; capacity) is appropriate at this stage and if future alternatives analyses are required.

Coordinate with the regulatory group, including conducting a workshop as needed, to determine applicable regulatory requirements for air quality and water quality compliance. Determine if additional projects are needed based on the regulatory review.

For each of the capital improvement projects, determine which projects should be grouped, develop capital cost estimates, and prioritize projects to develop a reasonable implementation plan. Compile these projects into a draft 50-year Capital Improvements Plan (CIP). For each project, provide the following details:

- Name
- Description, capacity, and estimated useful life of the facility and major assets
- Project development/definition steps
- LRFP Update to implementation schedule
- Estimated capital cost
- Estimated operations and maintenance cost
- Regulatory requirements
- Necessary sea level rise and changing shallow groundwater adaptations
- Projected start of construction (year) and construction duration

CONSULTANT will review Plant data, metered utility data, chemical costs, trucking costs, etc. and consult with Plant staff to estimate the O&M costs associated with each process (including recycled water facilities).

Develop a draft Recommended Improvements TM.

### **Task 6.2 – Final Recommended Improvements**

Conduct at least one workshop with Plant staff to review the draft Recommended Improvements. Incorporate City’s comments from the draft Recommended Improvements TM and the workshop comments in the final Recommended Improvements TM.

#### ***Deliverables:***

- Agenda, materials, and minutes for all workshops:
  - Project Identification Workshop.
  - Project Prioritization and Sequencing Workshop.
  - Recommended Improvements and 50-year CIP Workshop.
- Recommended Improvements TM, draft and final versions and comment log.
- Schematic of recommended improvement projects overlaid on an aerial image of the Plant with keynotes and legend.
- 50-year CIP Excel Model.

#### ***Assumptions:***

- Workshops will be attended by up to five Carollo staff and up to three Jacobs staff. Workshops will be virtual and have a 2-hour duration.
- Cost estimates will be developed consistent with AACE Class 5.
- All deliverables will be provided in electronic format.

### **Task 7 – Cost of Service Analysis**

#### **Task 7.1 – Operations and Maintenance Cost Allocation**

Perform a Cost of Service Analysis for the Plant’s Operations and Maintenance (O&M) costs. Allocate/proportion the estimated O&M costs from Task 6 based on each Partner Agency’s respective flows, loads, or other identified allocation parameters (as applicable).

Identify the share of O&M expenses for each process allocable for cost recovery from wastewater flow, BOD, suspended solids (SS), ammonia (NH<sub>3</sub>), and other parameters as warranted (e.g. some O&M costs may be equitably recovered based on the share of capacity owned by each member agency). The goal will be to determine cost recovery allocations for each Plant process for equitably recovering O&M costs from the City and its partner agencies.

Review how flow and load data is currently sampled and analyzed. Identify and evaluate options for establishing a consistent basis for measuring and determining wastewater flow and loadings for future O&M cost allocation. Consult with Plant staff and partner agencies to gain input and facilitate agreement regarding future flow and loading measurement.

Identify alternative approaches for using the flow and loading data for O&M cost allocation. For example, use of rolling multi-year data to help smooth annual changes in cost allocations, or evaluation of cost allocation based on the number of Equivalent Dwelling Units (EDUs) assigned to each agency.

Conduct a survey of other regional and comparable multi-agency wastewater treatment plants for purposes of identifying how other agencies a) measure flows and loadings for allocating costs to member agencies, and b) apportion O&M and capital cost to their member agencies.

Discuss how other comparable regional wastewater treatment facilities collect data and allocate O&M costs. As warranted, develop up to three alternative methods each for allocating O&M costs based on different combinations of allocation factors and assumptions of data availability for relevant allocation factors and assumptions of data availability for relevant allocation factors, which could include flow information, loading information, number of customers or other allocation factors identified as relevant to developing an efficient and equitable allocation approach. The following background context will be used to guide selection of appropriate allocation factors to include in the alternative methods:

Partners like Palo Alto, Mountain View, and Los Altos began using strength components in the cost of service by agreement on January 14, 1980 with an effective start date of July 1, 1980. This approach was formalized with EPASD in 1989 and Stanford and Los Altos Hills in 1986. The cost components are set at 34% flow, 22% ammonia (NH<sub>3</sub>), 22% total suspended solids (TSS), and 22% chemical oxygen demand (COD). The allocations may be altered “based upon actual cost data derived in accordance with generally accepted accounting principles and upon agreement of all parties hereto.” The City will use the results of this task to establish the cost data per generally accepted accounting principles to potentially change the allocation of total costs to be billed on annual basis for each of the six agencies and to potentially alter how data is collected for support of this calculation. City staff will handle Partner agreement changes and be supported by the CONSULTANT.

Compare the existing and alternative methods, including the impact of the various options on costs allocated to the partner agencies for O&M costs during a future budget year, such as FY 2025, that would be selected in collaboration with the City. Evaluate alternatives to current sampling practices used to generate load data. Make preliminary recommendation on cost allocation approach. Finalize recommended approach after discussion with the City of advantages and disadvantages of the approaches evaluated.

Draft an Operations and Maintenance Cost of Service TM Section. Facilitate a workshop to present the findings. Incorporate City's comments from the draft Operations and Maintenance Cost of Service TM Section and the workshop comments in the final Cost of Service Analysis TM.

### Task 7.2 – Capital Cost Allocation

Perform a Cost-of-Service Analysis for the Plant's Capital Costs. Review the Plant's current allocation of capital costs (debt) to the Partner Agencies as capacity shares. Partners established current fixed capacity shares in about April 1985 as follows:

<b>MAXIMUM FLOW CAPACITY RIGHTS EXPRESSED IN ANNUAL AVERAGE FLOW MILLION GALLONS PER DAY</b>						
Los Altos	Mountain View	East Palo Alto Sanitary District	Stanford University	Los Altos Hills	Palo Alto	Total
3.80	15.10	3.06	2.11	0.63	15.30	40.00

<b>FIXED CAPACITY SHARE OF CAPITAL ASSETS FOR DEBT SERVICE SHARE</b>						
Los Altos	Mountain View	East Palo Alto Sanitary District	Stanford University	Los Altos Hills	Palo Alto	Total
9.47%	37.89%	7.64%	5.26%	1.58%	38.16%	100%

Provide examples of capital cost allocations by other, comparable regional wastewater treatment plants.

Evaluate alternative capital cost allocation approaches, such as different mixes of allocation factors. Estimate the share of capital costs that would be allocated to the partner agencies in up to three alternative allocation approaches. The alternative approaches will use different combinations of allocation factors, such as capacity ownership, current and/or projected future wastewater flow, BOD, SS and NH<sub>3</sub> and other factors such as number of customers, as warranted, to allocate costs of the major capital projects to the partner agencies. Incorporate input from Plant staff. The goal will be to determine an equitable approach for allocating the costs of the major capital improvement projects to each partner agency. After consultation with Plant staff, make recommendation for capital cost allocation approach from among the ones evaluated, and identify the resulting costs for each partner for currently identified capital projects based on the recommended allocation approach.

Draft a Capital Cost of Service TM Section. Incorporate City's comments from the draft Capital Cost of Service TM Section and the workshop comments in the final Cost of Service Analysis TM.

Provide the City with a user-friendly Excel model of the proposed O&M and Capital cost allocation tables and projections. The model will be developed with input from Plant staff and will be designed to be easy to modify and update.

### **Task 7.3 – Presentation Materials**

Prepare a slide deck of technical support materials and exhibits for future City Council and Partner agency presentations, detailing the Plant's cost of service analysis method and Partner allocations. Provide each agency with a projection of its allocated O&M costs for the future budget year selected for the cost of service analysis in Task 7.2. and its allocated share of capital projects based on the selected methodology for capital cost allocation. Make content suitable for general audience understanding. Target a 20-minute length of presentation. Incorporate two cycles of City's review comments.

#### ***Deliverables:***

- Agenda, materials, and minutes for all workshops:
  - Operations and Maintenance Cost of Service Allocation Workshop.
  - Capital Cost of Service Allocation Workshop.
- Draft Operations and Maintenance Cost of Service TM Section.
- Draft Capital Cost of Service TM Section.
- Final Cost of Service TM.
- Cost of Service presentation materials for future City Council and partner agency presentations, two drafts and one final version.
- Cost Allocation Excel Model.

#### ***Assumptions:***

- Workshops will be attended by up to one BWA staff, up to one Jacobs staff, and up to one Carollo staff. Workshops will be virtual and have a 2-hour duration.
- All deliverables will be provided in electronic format.

### **Task 8 – Long Range Facilities Plan Update Report**

#### **Task 8.1 – LRFP Update Report**

Prepare a draft and a final Long Range Facilities Plan Update that incorporates the findings from Tasks 2 through 8. Clearly note assumptions and append calculations. Submit a draft table of contents to the City for approval. The following shall be included in the report:

- Executive Summary
- Summary of the planning process in general (including evaluation criteria and methods)
- Characterize the existing conditions, including:
  - Characterization of waste streams
  - Existing plant assessment and deficiencies
  - Environmental setting and land uses
  - Regulatory, Environmental, Financial, and Community Opportunities and Challenges
- Project Development

- Present and future requirements, needs, and opportunities
- Selection of most promising alternatives
- Evaluation of alternatives
- Life cycle costs
- Recommended Projects
  - Identify each Partner's capacities by project, as applicable.
  - Present tables and figures that show projects by type (e.g., driver (increased capacity, regulatory, and/or rehabilitation); flow, load, or flow and load), assumed construction start year, assumed midpoint of construction, assumed useful life, preliminary size and location, etc.
- Financial plan
  - Identify costs in aggregate and by Partner allocation.
  - Present project costs in both present value and in the assumed dollar value in the year of the construction start.

As directed by the City, prioritize the completion of Task 2 and Task 3 and summarize those findings in the Report. The background, alternatives, evaluations, and findings from Tasks 2 and 3 can be standalone sections (appendices) within the Report. Recommendations, including recommended capital projects from Tasks 2 and 3, shall be incorporated into the Report's recommended projects and finance plan.

### **Task 8.2 – Presentation Materials**

Prepare technical support materials and exhibits for City Council and partner agency presentations. This presentation will compile previous presentation sections developed in Tasks 2, 3, and 6. Make content suitable for a general public audience. Incorporate two cycles of City's review comments.

### **Task 8.3 – Presentation Support**

Support City staff with presentations to each partner agency, including an overview of the Long Range Facilities Plan Update, the cost of service methodology, and the capital cost allocated share methodology. Support City staff with presentations for public workshops on topics related to this scope of work.

- Presentation for public workshops (2 day and 1 night meetings, in-person)
- Presentation to Utilities Advisory Commission, Finance Committee, and Palo Alto City Council (3 night meetings, in-person)
- Presentation to Mountain View Council (1 night meeting, in-person)
- Presentation to East Palo Alto Sanitary District, Engineering Committee and Board of Directors (1 day meeting and 1 night meeting, in-person)
- Presentation to Los Altos City Council (1 night meeting, in-person)
- Presentation to Los Altos Hills Town Council (1 night meeting, in-person)
- Presentation to Stanford University staff (1 day meeting - virtual)
- Presentation to all partners (3 day meetings - virtual)

In-person support at a presentation shall include a member of the CONSULTANT's project management team. Other staff or subconsultants may support the presentation of the LRFP Update through virtual technology.



***Deliverables:***

- Draft Table of Contents for Long Range Facilities Plan Update Report.
- Long Range Facilities Plan Update Report, draft and final versions and comment log.
- Presentation materials for City Council and partner agency presentations, two drafts and one final version.

***Assumptions:***

- Presentations will be attended by up to one Carollo staff in person, up to two Carollo staff virtually, up to two Jacobs staff virtually, and up to one BWA staff virtually. Presentations and Q&A will have a 2-hour duration.
- All deliverables will be provided in electronic format.

**V. ADDITIONAL SERVICES**

The CONSULTANT shall provide additional services only by advanced, written authorization from the City. The CONSULTANT, at the City Project Manager's request, shall submit a detailed written proposal including a description of the scope of services, schedule, level of effort, and CONSULTANT's proposed maximum compensation, including reimbursable expense, for such services. The additional services scope, schedule and maximum compensation shall be negotiated and agreed to in writing by the City Project Manager and CONSULTANT prior to commencement of the of the services. The additional services include, but not limited to, the following:

- Additional technical supports associated with unforeseen conditions encountered during construction.
- Any additional work related to this Project, as requested by the City Project Manager, which is not in Basic Services.

**VI. TIME OF COMPLETION**

The project is budgeted for an estimated start date in the third quarter 2024, with a total duration (Task 1 – 8) of 30 months.

**VII. OTHER PROVISIONS**

Notwithstanding any provision herein to the contrary, CONSULTANT's duties and services described in this Scope of Services shall not include preparing or assisting CITY with any portion of CITY's preparation of a request for proposals, request for qualifications, or any other solicitation regarding a subsequent or additional contract with CITY. CITY shall at all times retain responsibility for public contracting, including with respect to any subsequent phase of this project. CONSULTANT's participation in the planning, discussions, or drawing of project plans or specifications shall be limited to conceptual, preliminary, or initial plans or specifications. CONSULTANT shall cooperate with CITY to ensure that all bidders for a subsequent contract on any subsequent phase of this project have access to the same information, including all conceptual, preliminary, or initial plans or specifications prepared by CONSULTANT pursuant to this Scope of Services.

**END OF SCOPE OF SERVICES**

EXHIBIT A-1  
PROFESSIONAL SERVICES TASK ORDER

CONSULTANT shall perform the Services detailed below in accordance with all the terms and conditions of the Agreement referenced in Item 1A below. All exhibits referenced in Item 8 are incorporated into this Task Order by this reference. CONSULTANT shall furnish the necessary facilities, professional, technical and supporting personnel required by this Task Order as described below.

CONTRACT NO.  
OR PURCHASE ORDER REQUISITION NO. (AS APPLICABLE)

1A. MASTER AGREEMENT NO. (MAY BE SAME AS CONTRACT / P.O. NO. ABOVE):  
1B. TASK ORDER NO.:  
2. CONSULTANT NAME:  
3. PERIOD OF PERFORMANCE: START: COMPLETION:  
4. TOTAL TASK ORDER PRICE: \$  
BALANCE REMAINING IN MASTER AGREEMENT/CONTRACT \$  
5. BUDGET CODE  
COST CENTER  
COST ELEMENT  
WBS/CIP  
PHASE  
6. CITY PROJECT MANAGER’S NAME & DEPARTMENT:  
7. DESCRIPTION OF SCOPE OF SERVICES (Attachment A)  
MUST INCLUDE:  
▪ SERVICES AND DELIVERABLES TO BE PROVIDED  
▪ SCHEDULE OF PERFORMANCE  
▪ MAXIMUM COMPENSATION AMOUNT AND RATE SCHEDULE (as applicable)  
▪ REIMBURSABLE EXPENSES, if any (with “not to exceed” amount)  
8. ATTACHMENTS: A: Task Order Scope of Services B (if any):

<p>I hereby authorize the performance of the work described in this Task Order.</p> <p>APPROVED: CITY OF PALO ALTO</p> <p>BY: _____ Name _____ Title _____ Date _____</p>	<p>I hereby acknowledge receipt and acceptance of this Task Order and warrant that I have authority to sign on behalf of Consultant.</p> <p>APPROVED: COMPANY NAME: _____</p> <p>BY: _____ Name _____ Title _____ Date _____</p>
---	--

## EXHIBIT B SCHEDULE OF PERFORMANCE

CONSULTANT shall perform the Services so as to complete each milestone within the number of days/weeks specified below. The time to complete each milestone may be increased or decreased by mutual written agreement of the Project Managers for CONSULTANT and CITY so long as all work is completed within the term of the Agreement. CONSULTANT shall provide a detailed schedule of work consistent with the schedule below within 2 weeks of receipt of the notice to proceed (“NTP”) from the CITY.

<b>Milestones</b>	<b>Completion Number of Days/Weeks (as specified below) from NTP</b>
1. Task 1 – Project Management	130 weeks
2. Task 2 – Biosolids Facility Plan (BFP) Update	74 weeks
3. Task 3 – Workspace Planning	74 weeks
4. Task 4 – Background and Baseline Information	50 weeks
5. Task 5 – Existing Plant Infrastructure and Process Assessment	50 weeks
6. Task 6 – Identification, Evaluation, and Recommendation of Alternatives/Improvements	83 weeks
7. Task 7 – Cost of Service Analysis	115 weeks
8. Task 8 – Long Range Facilities Plan Update Report	130 weeks

☒ Optional Schedule of Performance Provision for On-Call or Additional Services Agreements.  
(This provision only applies if checked and only applies to on-call agreements per Section 1 or agreements with Additional Services per Section 4.)

The schedule of performance shall be as provided in the approved Task Order, as detailed in Section 1 (Scope of Services) in the case of on-call Services, or as detailed in Section 4 in the case of Additional Services, provided in all cases that the schedule of performance shall fall within the term as provided in Section 2 (Term) of this Agreement.

## EXHIBIT C COMPENSATION

CITY agrees to compensate CONSULTANT for Services performed in accordance with the terms and conditions of this Agreement, and as set forth in the budget schedule below. Compensation shall be calculated based on the rate schedule attached as Exhibit C-1 up to the not to exceed budget amount for each task set forth below.

CITY's Project Manager may approve in writing the transfer of budget amounts between any of the tasks or categories listed below, provided that the total compensation for the Services, including any specified reimbursable expenses, and the total compensation for Additional Services (if any, per Section 4 of the Agreement) do not exceed the amounts set forth in Section 4 of this Agreement.

CONSULTANT agrees to complete all Services, any specified reimbursable expenses, and Additional Services (if any, per Section 4), within this/these amount(s). Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth in this Agreement shall be at no cost to the CITY.

### **BUDGET SCHEDULE**

<b>TASK</b>	<b>NOT TO EXCEED AMOUNT</b>
Task 1 (Project Management)	\$121,469
Task 2 (Biosolids Facility Plan Update)	\$474,073
Task 3 (Workspace Planning)	\$656,665
Task 4 (Background and Baseline Information)	\$264,826
Task 5 (Existing Plant Infrastructure and Process Assessment)	\$391,906
Task 6 (Identification, Evaluation, and Recommendation of Alternatives/Improvements)	\$276,523
Task 7 (Cost of Service Analysis)	\$139,364
Task 8 (Long Range Facilities Plan Update Report)	\$163,405
Sub-total for Services	<b>\$2,488,231</b>
Reimbursable Expenses (if any)	<b>\$5,200</b>
<b>Total for Services and Reimbursable Expenses</b>	<b>\$2,493,431</b>
Additional Services (if any, per Section 4)	\$249,343
<b>Maximum Total Compensation</b>	<b>\$2,742,774</b>

## **REIMBURSABLE EXPENSES**

CONSULTANT'S ordinary business expenses, such as administrative, overhead, administrative support time/overtime, information systems, software and hardware, photocopying, telecommunications (telephone, internet), in-house printing, insurance and other ordinary business expenses, are included within the scope of payment for Services and are not reimbursable expenses hereunder.

Reimbursable expenses, if any are specified as reimbursable under this section, will be reimbursed at actual cost. The expenses (by type, e.g. travel) for which CONSULTANT will be reimbursed are: **Travel/Mileage** up to the not-to-exceed amount of: **\$5,200**.

A. Travel outside the San Francisco Bay Area, including transportation and meals, if specified as reimbursable, will be reimbursed at actual cost subject to the City of Palo Alto's policy for reimbursement of travel and meal expenses.

B. Long distance telephone service charges, cellular phone service charges, facsimile transmission and postage charges, if specified as reimbursable, will be reimbursed at actual cost.

All requests for reimbursement of expenses, if any are specified as reimbursable under this section, shall be accompanied by appropriate backup documentation and information.

## EXHIBIT C-1 SCHEDULE OF RATES

CONSULTANT's schedule of rates is as follows:

**Prime Consultant: Carollo Engineers, Inc.**

### CAROLLO ENGINEERS, INC. FEE SCHEDULE FOR 2024, 2025, AND 2026

#### PALO ALTO LONG RANGE FACILITIES PLAN UPDATE

	<u>Hourly Rate</u> <u>2024 / 2025 / 2026</u>
<b>Engineers/Scientists</b>	
Assistant Professional I	\$173.00 / \$182.00 / \$191.00
Assistant Professional II	200.00 / 210.00 / 221.00
Assistant Professional III	231.00 / 243.00 / 255.00
Professional	257.00 / 270.00 / 284.00
Project Professional	284.00 / 298.00 / 313.00
Lead Project Professional	310.00 / 326.00 / 342.00
Senior Professional	336.00 / 353.00 / 371.00
<b>Technicians</b>	
Assistant Technicians I	160.00 / 168.00 / 176.00
Assistant Technicians II	184.00 / 193.00 / 203.00
Technicians	205.00 / 215.00 / 226.00
Senior Technicians	236.00 / 248.00 / 260.00
<b>Support Staff</b>	
Document Processing / Clerical	147.00 / 154.00 / 162.00
<b>Other Direct Expenses</b>	
Travel and Subsistence	at cost
Mileage	At IRS Reimbursement Rate
Subconsultant	cost + 5%
Expert Witness	Rate x 2.0

Subconsultant: Jacobs Engineering, Inc.

Jacobs Engineering, Inc.

Fee Schedule for 2024, 2025, 2026

Palo Alto Long-Range Facilities Plan Update

		<u>Hourly Rate</u>		
		<u>2024/2025/2026</u>		
<b>Engineers</b>				
	Project Engineer	\$ 150.00	\$ 157.50	\$ 165.38
	Engineer/Professional I	\$ 175.00	\$ 183.75	\$ 192.94
	Cost Estimator	\$ 175.00	\$ 183.75	\$ 192.94
	Engineer/Professional II	\$ 200.00	\$ 210.00	\$ 220.50
<b>Technologists</b>				
	Technologist/Project Engineer I	\$ 225.00	\$ 236.25	\$ 248.06
	Technologist/Project Engineer II	\$ 250.00	\$ 262.50	\$ 275.63
	Senior Project Manager	\$ 300.00	\$ 315.00	\$ 330.75
	Senior Technologist	\$ 300.00	\$ 315.00	\$ 330.75
	Principal In Charge	\$ 350.00	\$ 367.50	\$ 385.88
	Principal Technologist/Engineer	\$ 360.00	\$ 378.00	\$ 396.90
<b>Support</b>				
	Document Processor	\$ 150.00	\$ 157.50	\$ 165.38

Subconsultant: Bartle Wells Associates



**BARTLE WELLS ASSOCIATES**  
**BILLING RATE SCHEDULE 2024 - 2026**

**Professional Services (2024 Labor Rates)**

Financial Analyst I .....	\$120 per hour
Financial Analyst II .....	\$140 per hour
Associate Consultant .....	\$160 per hour
Consultant .....	\$180 per hour
Senior Consultant .....	\$210 per hour
Project Manager .....	\$240 per hour
Principal Consultant .....	\$270 per hour

**Professional Services (2025 Labor Rates)**

Financial Analyst I .....	\$124 per hour
Financial Analyst II .....	\$144 per hour
Associate Consultant .....	\$165 per hour
Consultant .....	\$185 per hour
Senior Consultant .....	\$216 per hour
Project Manager .....	\$247 per hour
Principal Consultant .....	\$278 per hour

**Professional Services (2026 Labor Rates)**

Financial Analyst I .....	\$128 per hour
Financial Analyst II .....	\$148 per hour
Associate Consultant .....	\$170 per hour
Consultant .....	\$191 per hour
Senior Consultant .....	\$222 per hour
Project Manager .....	\$254 per hour
Principal Consultant .....	\$286 per hour

The hourly rates for professional services include all overhead and indirect expenses. BWA does not charge for administrative support services. Expert witness, legal testimony, or other special limited assignments will be billed at 1.5 times the consultant’s hourly rate.

**Direct Expenses**

Subconsultants will be billed at cost plus ten percent. Other reimbursable direct expenses incurred on behalf of the agency will be billed at cost with no markup. These reimbursable costs include, but are not limited to:

- |                                |  |
|--------------------------------|--|
| ■ Travel, meals, lodging       | ■ Automobile mileage                   |
| ■ Printing and photocopying    | ■ Messenger services and mailing costs |
| ■ Special statistical analysis | ■ Graphic design and photography       |
| ■ Outside computer services    | ■ Special legal services               |
| ■ Bond ratings                 | ■ Legal advertisements                 |



## EXHIBIT D INSURANCE REQUIREMENTS

CONSULTANTS TO THE CITY OF PALO ALTO (CITY), AT THEIR SOLE EXPENSE, SHALL FOR THE TERM OF THE CONTRACT OBTAIN AND MAINTAIN INSURANCE IN THE AMOUNTS FOR THE COVERAGE SPECIFIED BELOW, **AFFORDED BY COMPANIES WITH AM BEST'S KEY RATING OF A-VII, OR HIGHER, LICENSED OR AUTHORIZED TO TRANSACT INSURANCE BUSINESS IN THE STATE OF CALIFORNIA.**

AWARD IS CONTINGENT ON COMPLIANCE WITH CITY'S INSURANCE REQUIREMENTS AS SPECIFIED HEREIN.

AWARD IS CONTINGENT ON COMPLIANCE WITH CITY'S INSURANCE REQUIREMENTS AS SPECIFIED HEREIN.				
REQUIRED	TYPE OF COVERAGE	REQUIREMENT	MINIMUM LIMITS	
			EACH OCCURRENCE	AGGREGATE
YES YES	WORKER'S COMPENSATION EMPLOYER'S LIABILITY	STATUTORY STATUTORY	STATUTORY	STATUTORY
YES	GENERAL LIABILITY, INCLUDING PERSONAL INJURY, BROAD FORM PROPERTY DAMAGE BLANKET CONTRACTUAL, AND FIRE LEGAL LIABILITY	BODILY INJURY	\$1,000,000	\$1,000,000
		PROPERTY DAMAGE	\$1,000,000	\$1,000,000
		BODILY INJURY & PROPERTY DAMAGE COMBINED.	\$1,000,000	\$1,000,000
YES	AUTOMOBILE LIABILITY, INCLUDING ALL OWNED, HIRED, NON-OWNED	BODILY INJURY	\$1,000,000	\$1,000,000
		- EACH PERSON	\$1,000,000	\$1,000,000
		- EACH OCCURRENCE	\$1,000,000	\$1,000,000
		PROPERTY DAMAGE	\$1,000,000	\$1,000,000
		BODILY INJURY AND PROPERTY DAMAGE, COMBINED	\$1,000,000	\$1,000,000
YES	PROFESSIONAL LIABILITY, INCLUDING, ERRORS AND OMISSIONS, MALPRACTICE (WHEN APPLICABLE), AND NEGLIGENT PERFORMANCE	ALL DAMAGES	\$1,000,000	
YES	<b>THE CITY OF PALO ALTO IS TO BE NAMED AS AN ADDITIONAL INSURED:</b> CONSULTANT, AT ITS SOLE COST AND EXPENSE, SHALL OBTAIN AND MAINTAIN, IN FULL FORCE AND EFFECT THROUGHOUT THE ENTIRE TERM OF ANY RESULTANT AGREEMENT, THE INSURANCE COVERAGE HEREIN DESCRIBED, INSURING NOT ONLY CONSULTANT AND ITS SUBCONSULTANTS, IF ANY, BUT ALSO, WITH THE EXCEPTION OF WORKERS' COMPENSATION, EMPLOYER'S LIABILITY AND PROFESSIONAL INSURANCE, <b>NAMING AS ADDITIONAL INSUREDS CITY, ITS COUNCIL MEMBERS, OFFICERS, AGENTS, AND EMPLOYEES.</b>			

I. INSURANCE COVERAGE MUST INCLUDE:

- A. FOR GENERAL LIABILITY AND AUTOMOBILE LIABILITY. A CONTRACTUAL LIABILITY ENDORSEMENT PROVIDING INSURANCE COVERAGE FOR CONSULTANT'S AGREEMENT TO INDEMNIFY CITY.

II. THE CONSULTANT MUST SUBMIT CERTIFICATES(S) OF INSURANCE EVIDENCING REQUIRED COVERAGE AT THE FOLLOWING EMAIL: [PURCHASINGSUPPORT@CITYOFPALOALTO.ORG](mailto:PURCHASINGSUPPORT@CITYOFPALOALTO.ORG)

III. ENDORSEMENT PROVISIONS WITH RESPECT TO THE INSURANCE AFFORDED TO ADDITIONAL INSUREDS:

A. PRIMARY COVERAGE

WITH RESPECT TO CLAIMS ARISING OUT OF THE OPERATIONS OF THE NAMED INSURED, INSURANCE AS AFFORDED BY THIS POLICY IS PRIMARY AND IS NOT ADDITIONAL TO OR CONTRIBUTING WITH ANY OTHER INSURANCE CARRIED BY OR FOR THE BENEFIT OF THE

ADDITIONAL INSURED.

B. CROSS LIABILITY

THE NAMING OF MORE THAN ONE PERSON, FIRM, OR CORPORATION AS INSURED UNDER THE POLICY SHALL NOT, FOR THAT REASON ALONE, EXTINGUISH ANY RIGHTS OF THE INSURED AGAINST ANOTHER, BUT THIS ENDORSEMENT, AND THE NAMING OF MULTIPLE INSURED, SHALL NOT INCREASE THE TOTAL LIABILITY OF THE COMPANY UNDER THIS POLICY.

C. NOTICE OF CANCELLATION

1. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR ANY REASON OTHER THAN THE NON-PAYMENT OF PREMIUM, THE CONSULTANT SHALL PROVIDE CITY AT LEAST A THIRTY (30) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.
2. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR THE NON-PAYMENT OF PREMIUM, THE CONSULTANT SHALL PROVIDE CITY AT LEAST A TEN (10) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.

**EVIDENCE OF INSURANCE AND OTHER RELATED NOTICES ARE REQUIRED TO BE  
FILED WITH THE CITY OF PALO ALTO SENT TO THE FOLLOWING EMAIL:  
[PURCHASINGSUPPORT@CITYOFPALOALTO.ORG](mailto:PURCHASINGSUPPORT@CITYOFPALOALTO.ORG)**