



STANDARD CONSULTANT AGREEMENT

(For Capital Consultant Contracts)
Terms and Conditions Template
Rev. B [5/11/2020-6/30/2021]

This agreement (Agreement) is effective once fully executed (Effective Date), by and between SANTA CLARA VALLEY WATER DISTRICT (Valley Water/District), and ANCHOR QEA, LLC, a Washington limited liability company (Consultant), individually the Party or collectively the Parties.

WHEREAS, Valley Water desires certain services hereinafter described and Consultant affirms it has the requisite experience and expertise, and desires to provide such services.

NOW, THEREFORE, Valley Water and Consultant, for the consideration and upon the Terms and Conditions specified, agree as follows:

SECTION ONE

SCOPE OF SERVICES

The Scope of Services (Services) to be performed pursuant to this Agreement is described in the Schedule(s), Scope of Services, attached hereto and incorporated herein by this reference (Schedule(s)). Services described in each Schedule are considered a Scope of Services that is separate and apart from the Scope of Services described in another Schedule.

SECTION TWO

DUTIES OF CONSULTANT

1. Performance

- A. Each Scope of Service described in an attached Schedule(s) must be performed by Consultant, or at its direction, to meet the purposes specified in this Agreement. References to "Consultant" herein include those performing any portion of the Services at its direction such as Subconsultants, vendors, suppliers, subcontractors, and other business entities and individuals. Consultant will collaborate with Valley Water staff in engineering, asset management, operations, and maintenance units to be made aware of Valley Water operational constraints, procedures, or preferences relevant to Consultant's performance of the Services described in the attached Schedule(s).
- B. Unless the requirements for the Services described in the attached Schedule(s) are specifically modified in writing, Consultant must perform Services and provide all deliverables as required.
- C. Consultant shall not undertake any Services not described in the attached Schedule(s) unless authorized in writing by Valley Water prior to the performance of such Services by issuance of a Task Order or pursuant to an amendment to this Agreement signed by both Parties.

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2. Consultant Controlled Areas

Consultant is responsible for the security and safety of the area(s) it controls wherein it is required to perform field operations pursuant to the Scope of Services.

3. Licensing

Services performed by Consultant will be undertaken only by persons appropriately licensed, certified, or registered in California, as applicable to the Services described herein, when required by statutes or regulations, as well as pursuant to the relevant standard of care as described in subsection 11. Standard of Care. Examples of such Services include those performed by: California State Licensed Contractors, Professional Engineers and Architects, Inspectors, and Surveyors. Consultant shall make available upon Valley Water's request documentation of qualifications and licensing of personnel performing Services described herein. Consultant must be registered with the California Department of Labor Standards Enforcement if the Services or a portion thereof is determined to be "Public Works" pursuant to California Labor Code §1720(a)(1).

4. Valley Water's Approval of Deliverables

Deliverables prepared by Consultant, notwithstanding acceptance and approval by Valley Water, which Valley Water determines must subsequently be modified due to errors or omissions, will be corrected at no additional cost to Valley Water.

5. Errors and Omissions

The Services may include preparation of deliverables by Consultant to be implemented in a public works construction project. Consultant is responsible for any direct or actual damages incurred by Valley Water which Valley Water determines result from Consultant's errors or omissions in Consultant's deliverables, including, but not limited to, any increase in Valley Water's payment(s) due to its construction contractor, which increase is directly attributable to required revisions to the construction contract documents to the extent caused by Consultant's negligent acts, errors, or omissions.

6. Valley Water Standardization Requirements

- A. Consultant shall perform the Services utilizing Valley Water nomenclature, standardized forms, software requirements, documented procedures, and best management practices. Consultant shall use Microsoft Office software and AutoCAD software that is compatible with Valley Water Microsoft Office software and AutoCAD software used at the time(s) Valley Water issues a Notice to Proceed pursuant to this Agreement.
- B. Engineering drawings prepared by Consultant must be in compliance with Valley Water's CADD and drafting standards including line types, line weights, text sizes, text orientation, dimensioning, labeling/numbering system for detailed plan views and detailed section views. Drawings prepared using different CADD software and versions must be converted to be compatible with Valley Water's CADD software at no additional cost to Valley Water. Prior to acceptance, Valley Water reserves the right to test the submitted CADD files to verify that the files are not corrupted or missing linkages (for

blocks, etc., used in the drawing) and that the standards are retained during the conversion process used by the Consultant.

7. Consultant's Key Staff and Subconsultants

- A. Consultant's Key Staff and firms subcontracted by the Consultant (Subconsultants) assigned to perform the Services are identified in the Schedule Scope of Services, Attachment Three, Consultant's Key Staff and Subconsultants.
- B. The Project team organization chart and delegated responsibilities of each team member will be submitted to Valley Water for concurrence.
- C. Consultant may utilize Subconsultants, subcontractors, suppliers, or vendors it deems appropriate to the complexity and nature of the required Services.
 - 1) Consultant must obtain Valley Water's approval of all Subconsultants. Upon Valley Water's request, Consultant must provide copies of all Subconsultant agreements.
 - 2) Consultant must require its delegates or Subconsultants to agree, in writing, to adhere to Terms and Conditions of this Agreement.
- D. Any delegation or use of Subconsultants by Consultant will not operate to relieve Consultant of its responsibilities as described in this Agreement.
- E. If any of Consultant's designated key staff persons or Subconsultants fail to perform to the satisfaction of Valley Water, on written notice from Valley Water, Consultant will have 15 calendar days to remove that person from the Project and provide a replacement acceptable to Valley Water.
- F. Consultant will not charge Valley Water for the time it takes Consultant's replacement personnel to obtain Valley Water-specific Project knowledge in the possession of the person(s) being replaced.
- G. Consultant's Key Staff: Valley Water Project Manager may approve any revisions to Consultant's list of key staff assigned to the Project as an administrative modification to this Agreement, and such approval will be confirmed in writing.
- H. Consultant's Subconsultants
 - 1) Valley Water Project Manager may approve any revisions to Consultant's list of authorized Subconsultants when the Subconsultant is deleted from the list and the Scope of Services is deleted from the Agreement or such services are assumed by the Consultant; such approval will be confirmed in writing.
 - 2) Valley Water's authorized representative may approve any revisions to Consultant's list of authorized Subconsultants when a listed Subconsultant is replaced (to perform the same Scope) or a new Subconsultant is added (to perform new Scope), provided the firm complies with all insurance requirements established by Valley Water for such work; such approval will be confirmed in writing.

8. Compliance with All Laws

- A. Consultant's performance must be in compliance with the most current versions of any and all laws relevant to the Services it performs pursuant to this Agreement, including, but not limited to adherence to: all applicable governmental laws, statutes, ordinances, rules, codes, regulations, orders, and other requirements; governmental requirements applicable to state and federal compliance with the Professional Land Surveyors Act; state and federal Endangered Species Act; state and federal water quality laws; and all other state and federal laws or regulations regarding environmental protection and compliance, health, safety, wages, hours, equal employment opportunity, nondiscrimination, working conditions, and transportation. In the event that Valley Water's assistance is necessary to achieve such compliance, Consultant shall promptly notify Valley Water.
- B. Consultant shall provide, at Valley Water's request, documentation demonstrating Consultant's compliance with all laws as described herein. After reasonable notice and according to reasonable conditions, Valley Water has the right to inspect and copy any records of Consultant regarding such compliance.
- C. Consultant represents and warrants that neither Consultant nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal government department or agency.

9. Occupational Safety and Health

- A. Consultant will perform the Services in compliance with the most current versions of all laws, standards, rules, and regulations of the Occupational Safety and Health Act, and all state and federal laws and regulations relating to safety and health standards. Consultant shall perform the Services in compliance with, will furnish only supplies, articles, and equipment that comply with such laws, standards, and regulations.
- B. Consultant shall immediately notify Valley Water in the event of any personal injury accident or occurrence occurring during the performance of the Services. Upon Valley Water's request, Consultant shall provide Valley Water with documentation fully describing the accident and injury and the actions implemented to prevent similar occurrences.

10. Consultant as Independent Contractor

Consultant will perform all Services as an independent contractor and not an agent or employee of Valley Water. Consultant represents and warrants that it and its contractors who are performing any of the Services as Subconsultants will perform such Services as an independent contractor, and neither Consultant nor Subconsultants nor their employees are the servants, agents or employees of Valley Water. Except as expressly provided in this Agreement, Valley Water exercises no direction, supervision or control over Consultant, its employees, agents, or Subconsultants.

11. Standard of Care

- A. Consultant must possess and maintain during the term of this Agreement all certifications, licenses, permits, and qualifications to perform the Services and prepare all deliverables. Consultant must perform all Services and prepare all deliverables in accordance with those standards and practices of care, skill, and diligence that are generally recognized and customarily observed by competent persons in Consultant's area of specialty in the State of California at the time such Services are rendered.
- B. Consultant shall perform the Services and prepare all deliverables without any errors or omissions, and in accordance with Section Two, Duties of Consultant, subsection 8. Compliance with All Laws.
- C. Consultant and its Subconsultants must perform the Services in compliance with all applicable written federal, state and local codes, statutes, laws, regulations, and ordinances, including, but not limited to, environmental, energy conservation, and disabled access requirements as per the provisions of Section Two, Duties of Consultant, subsection 8. Compliance with All Laws.

SECTION THREE

DUTIES OF VALLEY WATER

1. Available Data

Valley Water will make available to Consultant all data and information in its possession and control and which it deems necessary to the preparation of the deliverables specified in the Schedule(s). Valley Water will actively aid and assist Consultant in obtaining such information from other agencies and individuals as it deems necessary. Valley Water is not responsible for providing data and information that it does not possess.

2. Review of Deliverables

- A. Valley Water will designate a Project Manager (Valley Water Project Manager) for purposes of administering and managing this Agreement.
- B. Consultant's progress in completing the Services will be reviewed by Valley Water Project Manager at each milestone identified in the Schedule(s) and at such other time(s) at the discretion of Valley Water.
- C. Consultant must notify Valley Water in writing when it completes each deliverable described in the Schedule(s) and provide Valley Water with said deliverable. Deliverables deemed satisfactory and in compliance with this Agreement are subject to approval by Valley Water. Within 30 calendar days of receipt of each deliverable, Valley Water will either (1) notify Consultant that Valley Water accepts the deliverable, or (2) notify the Consultant that the deliverable is not acceptable and must be revised.

- D. If Valley Water advises Consultant that a deliverable must be revised due to errors or omissions by the Consultant, Consultant must correct, at no cost to Valley Water, those deficiencies as soon as possible and shall notify Valley Water upon completion of the revised deliverable and submit to Valley Water.
- E. Valley Water will then review the revised deliverable and within 30 calendar days of receipt, advise the Consultant if the revised deliverable is acceptable. All deficient deliverables will be revised at no cost to Valley Water and this process will continue until Consultant has corrected all deficiencies identified by Valley Water.
- F. None of the proposed changes or revisions or anything else in this Agreement will be construed to relieve the Consultant of professional or legal responsibility for the performance of the Services as otherwise required by the Terms and Conditions of this Agreement. Corrections to any deliverable as a result of Consultant's errors or omissions, as determined by Valley Water, will not result in additional costs or expenses to Valley Water.

3. Access to Valley Water Facilities

Valley Water will facilitate access to Valley Water facilities as required for the Consultant to perform the Services.

SECTION FOUR

FEES AND PAYMENTS

1. Total Fixed Not-to-Exceed Fees

- A. Payment for all Services performed by Consultant to the satisfaction of Valley Water, as described in the Schedule(s) will be based on the hourly rates, subject to the Total Fixed Not-to-Exceed (NTE) Fees stated in the Schedule, Attachment One, Fees and Payments, for completion of the associated tasks. Valley Water will make payments to the Consultant according to the terms provided for herein and in the Schedule, Attachment One, Fees and Payments. Payments made by Valley Water to the Consultant for Services rendered will be considered full compensation for all personnel, materials, supplies, Subconsultant(s), equipment, reimbursable travel and per diem expenses incurred by the Consultant to perform the Services.
- B. Upon the written approval of Valley Water Deputy Operating Officer referenced herein, unused fees from a completed or cancelled task may be re-allocated to a task that has not yet been completed, provided the Agreement Total Not-to-Exceed Fees is not exceeded. Transferring fees from a task not yet completed to a different task is not permitted.
- C. Upon the written approval of Valley Water Deputy Operating Officer referenced herein, the Scope of Services described in a task may be reduced or eliminated. If the Scope of Services of a task is reduced or eliminated, the portion of the fees attributable to that reduced or eliminated task may be allocated to revised existing tasks, or transferred to a Supplemental Services task, if provided for herein.

- D. Any reduction or elimination of tasks and any inter-task transfers will be clearly noted and described in the subsequent monthly progress report to Valley Water.
- E. Services to be performed pursuant to the Supplemental Services task, if provided for herein, will commence only after issuance of a fully executed Task Order.
- F. Automobile travel mileage expenses will be paid at the current IRS rate. Valley Water will not reimburse Consultant nor its Subconsultants for mileage nor travel time to and from Valley Water Headquarters and surrounding campus located at 5700 Almaden Expressway, San Jose, California. However, Valley Water will reimburse Consultant and its Subconsultants for mileage incurred from Valley Water Headquarters or Consultant's and Subconsultants' firm address, whichever is closer to the destination, to Project site(s) and, if directed or authorized by Valley Water, to meeting locations such as with regulatory agencies, for community outreach activities and meetings, for partnering meetings, and Dispute Review Board meetings.

2. Consultant Monthly Invoices

- A. Consultant's monthly invoices will be prepared in accordance with the terms of this Agreement, Section Four Fees and Payments and Exhibit A, Section 2, and represent Services performed and reimbursable costs incurred during the identified billing period. Invoices must be consistent with Scope of Services described in the Schedule(s) attached hereto; and include the following:
 - 1) Employee classification and name itemized with all labor charges by Service task;
 - 2) Summary of the amount Consultant has been billed by their Subconsultants and further detailed by Service task;
 - 3) Other direct charges and expenses by Service task;
 - 4) Other direct charges and expenses must reflect actual fees versus the Agreement Not-to-Exceed Fees as stated in the Schedule, Attachment One, Fees and Payments; and
 - 5) To the extent that the Consultant is adding an administrative, processing, overhead or mark-up fee, Valley Water will not pay for such duplication of costs for both the Consultant and its Subconsultants.
- B. Before submitting monthly invoices, a progress report and draft invoice (in Adobe PDF format) will be provided by the Consultant for preliminary review by Valley Water Project Manager. Upon preliminary approval by Valley Water, the Consultant will mail the complete signed and dated hardcopy invoice, including all supporting documentation. Valley Water's preliminary review of the draft invoice does not represent final approval of the hardcopy invoice, but is intended to reduce potential for re-submittals of hardcopy invoice by Consultant.

- C. Each monthly invoice must include a monthly progress report that documents whether or not the Services are on schedule to be completed in accordance with the Schedule, Attachment Two, Schedule of Completion, which applies to the specific Scope of Services, and within the Agreement NTE Fees in accordance with the Schedule, Attachment One, Fees and Payments. The progress report shall document Services completed, the execution of the tasks described in this Services, and enable Valley Water to evaluate the Consultant's progress and performance towards completion of the Services.

1) The monthly progress report shall include:

- a. An assessment of actual versus planned progress in completing the Services, including a description of the tasks and deliverables completed to date;
- b. A look-ahead schedule listing deliverables and activities planned for the next two months;
- c. A statement that progress towards completion of the Services is on schedule and will be completed within the timeline set forth in the Schedule of Completion; or, if completion of the Services is not on schedule, then a statement of the anticipated length of the delay, the cause of the delay, measures proposed or taken to prevent or minimize the delay, and the schedule for implementation of such measures;
- d. A summary of performed tasks to date, an updated Project work plan including estimate of work required to complete this Agreement, explanation of any major variances in percentage of services to be completed compared to percentage of this Agreement NTE fees remaining, and any anticipated changes to this Agreement that may be necessary to complete the Services;
- e. For any proposed change to the Scope of Services, provide a summary of the proposed changes, including supporting rationale for such change;
- f. For each task, the percentage of the fees incurred for the task compared to dollar amount allocated to the task, the percentage of services performed versus the percentage of Agreement NTE fees incurred for such task, and explanation of any significant variances in percentage of services performed compared to percentage of fees incurred;
- g. A statement that all tasks, as specified in this Agreement, shall be completed within the NTE amount of the Agreement;
- h. Level of Small Business Enterprise (SBE) participation, if applicable, documenting the level of SBE participation throughout the Project; and
- i. Any changes in Consultant's key staff or Subconsultants.

D. Invoices will include a summary of labor expenditures, direct costs, and billed Subconsultant charges. Invoices, transmitted separately from the monthly progress reports, will be organized such that the billing categories correspond with the Services tasks.

E. Consultant shall send all invoices as follows: APinvoice5750@valleywater.org

Valley Water address, if needed:

Santa Clara Valley Water District
Attention: Accounts Payable
P.O. Box 20670
San Jose, CA 95160-0670

F. In addition to ensuring that each invoice is accompanied with a monthly progress report, Consultant must also ensure that each invoice contains the following information:

- 1) Agreement Number;
- 2) Full Legal Name of Consultant/Firm;
- 3) Payment Remit-to Address;
- 4) Invoice Number;
- 5) Invoice Date (the date invoice is mailed);
- 6) Detailed description of services provided, including the “distribution account(s)” for those services;
- 7) Number of hours spent by each person performing services and a brief description of the services performed by each person; and
- 8) Beginning and end date for billing period that services were provided.

G. Consultant shall invoice for its performance of the Services on a monthly basis consistent with the task fee breakdown stated in the Schedule(s), Attachment One, Fees and Payments, which applies to the specific Scope of Services.

H. Valley Water Project Manager will review Consultant’s written invoice within five Valley Water business days of receipt, address any questions with Consultant’s Contact/Principal Officer and approve the undisputed amount of the invoice within ten working days of receipt of the invoice. Valley Water will pay undisputed invoice amounts within 30 calendar days from date invoice is received by Valley Water Project Manager.

I. Consultant’s services will be performed by its staff members and Subconsultants’ staff members at the lowest hourly and unit rates commensurate with the complexity of the required Services.

J. Consultant shall ensure that its personnel performing services pursuant to this Agreement document their time doing so.

3. Prevailing Wages

- A. A portion of the Services to be performed pursuant to this Agreement may be considered “Public Works” subject to California Labor Code §1771, et. seq. and the applicable implementing regulations. If Consultant’s Services includes such work, Consultant and its Subconsultants must comply with all Labor Codes applicable to prevailing wages.
- B. Labor Code §1720 provides as follows:
 - “(a) As used in this chapter, “public works” means all of the following:
 - (1) Construction, alteration, demolition, installation, or repair work done under contract and paid for in whole or in part out of public funds, except work done directly by a public utility company pursuant to order of the Public Utilities Commission or other public authority. For purposes of this paragraph, “construction” includes work performed during the design, site assessment, feasibility study, and other preconstruction phases of construction, including, but not limited to, inspection and land surveying work, regardless of whether any further construction work is conducted, and work performed during the postconstruction phases of construction, including, but not limited to, all cleanup work at the jobsite. For purposes of this paragraph, “installation” includes, but is not limited to, the assembly and disassembly of freestanding and affixed modular office systems.”
- C. Consultant and its Subconsultants shall not engage in the performance of public work, as defined in California Labor Code §1771.1, unless currently registered and qualified to perform public work pursuant to California Labor Code §1725.5.
- D. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State throughout the term of this Agreement. Notwithstanding any other provision of this Agreement, Consultant will not be entitled to any adjustment in compensation rates in the event there are adjustments to the General Prevailing Wage Rates.
- E. This Agreement is subject to compliance monitoring and enforcement by the State of California Department of Industrial Relations. Upon request, Consultant and Subconsultants must furnish the records specified in Labor Code §1776 directly to the Labor Commissioner, in a format prescribed by the Labor Commissioner.
- F. All records or documents required to be kept verifying statutory compliance with the prevailing wage requirement, such as certified payroll records, must be made available for audit at no cost to Valley Water, in electronic or hard copy format, at Valley Water’s discretion, and hard copies made available at any time during regular business hours, upon written request by Valley Water.

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G. California State Department of Industrial Relations Contractor and Sub-Contractor Registration Requirements

Prior to Valley Water executing a Task Order for Services involving public works, as defined herein, Consultant, and its Subconsultant(s) performing public works, must provide evidence, in the form required by Valley Water, that Consultant and its Subconsultant(s) are in compliance with the California State Department of Industrial Relations Contractor and Sub-Contractor Registration Requirements.

4. Retention

- A. Unless otherwise specified in the Schedule(s), Attachment One, Fees and Payments, when the total compensation payable pursuant to this Agreement exceeds \$20,000, ten percent of each invoice will be withheld by Valley Water and not paid to Consultant until 30 calendar days after the assigned Valley Water representative signs the final approval for all Services/deliverables as stated in the applicable Schedule, Attachment Two, Schedule of Completion, and Section Three, Duties of Valley Water, subsection 2. Review of Deliverables.
- B. Provided that at any time after 50% of the work has been completed, Valley Water may, at its sole discretion, determine that satisfactory progress is being made in the completion of the Agreement, and prospectively make the remaining progress payments in full. The retention previously withheld on the first 50% of the work will continue to be withheld until final contract close out.

SECTION FIVE

SCHEDULE OF COMPLETION

1. Performance of Tasks

Consultant will commence performing the tasks described in the Scope of Services of the attached Schedule(s) to this Agreement upon receipt of the Notice to Proceed (NTP) issued by Valley Water.

2. Project Schedule Table

Consultant will perform and complete the services described in the Scope of Services in accordance with the Project Schedule table (Project Schedule) as stated in the Schedule, Attachment Two, Schedule of Completion. Consultant will coordinate services with Valley Water to provide the timeline of all tasks and subtasks, including the site visits, document review, meetings, and deliverables.

3. Monitoring of Project Schedule

The approved Project Schedule will be monitored monthly. Changes to the schedule for performance of tasks and deliverables are subject to advance written approval by Valley Water.

4. Project Delays

Consultant will make all reasonable efforts to comply with the Project Schedule as stated in the Schedule, Attachment Two, Schedule of Completion. In the event the Project Schedule will be delayed, Consultant will notify Valley Water Project Manager as soon as possible,

providing the reason why, the length of the delay, and a description of the actions being taken to address the delay. In the event Consultant is delayed in performance of its services by circumstances beyond its control, Valley Water may, at its discretion, grant a reasonable adjustment in the Project Schedule.

5. Changes to the Project Schedule

Valley Water Project Manager and Consultant may agree to modify the Project Schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modifications in writing.

SECTION SIX

AGREEMENT MODIFICATIONS

The Parties may agree to modify the Terms and Conditions of this Agreement by executing a written amendment hereto.

SECTION SEVEN

TERM AND TERMINATION

1. Term & Automatic Termination

This Agreement encompasses all Services that Consultant is responsible to perform within the time limits and Not-to-Exceed Fees set forth herein. Consultant will not undertake to provide Services where it reasonably appears that the Services cannot be provided and expenses cannot be incurred within said total compensation limit and the applicable Not-to-Exceed Fees of any Task Order.

2. Valley Water Rights

- A. Suspension: Valley Water may, by written notice to Consultant, suspend any or all Services pursuant to this Agreement or to any individual Task Order. Valley Water may subsequently terminate this Agreement or any Task Order for convenience, or determine to proceed. If a decision to proceed is not made within 90 days from the date of the notice of suspension, any decision to proceed must be conditioned upon execution of a new Notice to Proceed or Task Order.

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- B. Termination for Convenience: Valley Water may, by written notice to Consultant, terminate all or part of this Agreement or any Task Order at any time for Valley Water's convenience. Upon receipt of such notice, Consultant will immediately cease all work as specified in the notice. If this Agreement or any Task Order is so terminated, Consultant will be compensated as set forth in subsection 3. Consultant's Compensation upon Termination or Suspension.
- C. Termination for Breach: If Consultant violates any of the covenants, agreements or stipulations of this Agreement or a Task Order, or if Consultant fails to fulfill in a timely and proper manner its obligations pursuant to this Agreement or any Task Order, and does not cure such failure or violation within 30 days (or a reasonable extension thereof, if requested, which extension will not be unreasonably withheld) after receipt of written notice from Valley Water specifying such failure or violation, Valley Water will thereupon have the right to terminate this Agreement and any or all uncompleted Task Orders by giving written notice to Consultant of such termination. Such notice will specify the effective date thereof, and Consultant will not be entitled to compensation for services or expenses beyond the specified termination date.
- D. If, after notice of termination for breach of this Agreement or any Task Order, it is determined that Consultant did not breach the Agreement or Task Order, the termination will be deemed to have been effected for Valley Water's convenience, and Consultant will receive payment that is allowed by this Agreement for a termination for convenience.
- E. The rights and remedies provided herein to Valley Water are in addition to any other rights and remedies provided by law, this Agreement, or a Task Order.

3. Consultant's Compensation upon Termination or Suspension

In the event of termination of this Agreement or any Task Order, or suspension of Services by Valley Water, Consultant shall receive compensation based on satisfactory performance, accepted by Valley Water, as follows:

- A. Direct Labor: Consultant shall be entitled to receive compensation for all authorized direct labor performed prior to termination pursuant to the provisions of this Agreement or Task Order and all authorized labor expenses incurred to demobilize from the Project after the date of termination;
- B. Other Direct Costs and Expenses: Consultant shall be entitled to receive compensation for all authorized other direct costs and expenses incurred prior to termination and all authorized expenses incurred to demobilize from the Project after the date of termination; and
- C. In no event shall the total compensation paid for any item of Service exceed the payment specified in the Agreement or applicable Task Order for that item of Service.

4. Survival

The Terms and Conditions of this Agreement, that by their context and a standard of reasonableness, are intended to survive termination, suspension, completion, and expiration of this Agreement, shall survive, including but not limited to, the following Sections and subsections: Independent Contractor Status, Confidentiality, Indemnification, Insurance Requirements, and Dispute Resolution, as well as any Consultant representations and warranties.

SECTION EIGHT

INDEMNIFICATION

Notwithstanding any other provision of this Agreement, Consultant agrees to indemnify, defend and hold harmless Valley Water, its agents, officers, directors, and employees from and against any and all demands, claims, damages, losses and reasonable expenses, including but not limited to liabilities, obligations, claims, costs, reasonable expenses (including, without limitation, interest, penalties and reasonable attorney's fees), fines, taxes, levies, imposts, assessment, demands, damages or judgments of any kind or nature, whether in law or equity (including, without limitation, death or injury to any person, property damage, administrative and judicial orders and consents, or any other loss) to the extent they arise out of, pertain to, or relate to the Consultant's negligence, recklessness, or willful misconduct. The foregoing does not limit any strict liability imposed onto the Consultant by law. The rights, duties, and obligations of the Parties as set forth above in this Section Eight, Indemnification, survive termination, expiration, completion, and suspension of this Agreement.

SECTION NINE

INSURANCE REQUIREMENTS

Insurance requirements applicable to this Agreement are set forth in the Standard Consultant Agreement, Appendix Four, Insurance Requirements. Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, all insurance coverages as detailed in the Standard Consultant Agreement, Appendix Four, Insurance Requirements and comply with all provisions stated therein.

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SECTION TEN

OWNERSHIP AND REUSE OF DELIVERABLES

1. Valley Water Ownership

All deliverables and other materials prepared by Consultant, including computer programs and media developed by the Consultant, to perform the Services, during the term of this Agreement, will be and remain the property of Valley Water following payment in full to Consultant for each task or portion of a completed task, or in accordance with Section Seven Term and Termination. In the event the work is not completed, the completed portions thereof will become the property of Valley Water. Consultant will provide Valley Water with such deliverables and material at appropriate times during this Agreement. Consultant may retain a copy for its records. Consultant does not convey, assign, or transfer the intellectual property rights it has so as to limit its ability or right to develop, design, or provide services on other projects of or for its other clients.

2. Reuse of Instruments of Service

If Valley Water desires to reuse the completed plans, specifications, or other deliverables, in total or in part, on project sites associated with this Agreement, or any other site, or to complete any incomplete portion of construction documentation which Valley Water has already paid Consultant, Valley Water will release Consultant from any liability incurred by Valley Water from reusing said deliverables.

3. Copies of Data

Copies of data exchanged by, through, and between Valley Water and Consultant that may be relied upon are limited to printed copies. Computer-generated files, disks, or tapes of text, data or graphics that are furnished are only for the mutual convenience of the Parties.

4. Computer-Generated Material

Any risk of translation or reliance on information obtained or derived from computer-generated material is at the user's sole risk, and no representations are made, either express or implied, as to the long-term performance of data thus transferred.

5. Work for Hire

Any and all original correspondence, memoranda, reports, designs, plans, specifications, data compilations, computer programs, or drawings created specifically for Valley Water by Consultant according to the Terms of this Agreement, in or by any medium is deemed to be "work for hire" according to the copyright laws of the United States and the copyright belongs to Valley Water.

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6. Copyright Claims

Co-venturers, subcontractors, Subconsultants, suppliers, and vendors to Consultant are likewise bound by these copyright terms. Valley Water makes no copyright claim and requires no release for copyrighted material or trademarked names used incidentally by Consultant.

SECTION ELEVEN

EQUAL OPPORTUNITY

1. Equal Opportunity Employer

Valley Water is an equal opportunity employer and requires its consultants to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Agreement, Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including apprenticeship), or against any other person, on the basis of sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.

2. Compliance with Applicable Equal Opportunity Laws

The Consultant's policy must conform with applicable state and federal guidelines including the Federal Equal Opportunity Clause, "Section 60-1.4 of Title 41, Part 60 of the Code of Federal Regulations," Title VII of the Civil Rights Act of 1964 as amended; the Americans with Disabilities Act of 1990; the Rehabilitation Act of 1973 (§503 and §504); the Age Discrimination Act of 1975 (42 U.S.C. §6101 et seq.); the California Fair Employment and Housing Act (Government Code §12900 et. Seq.); and California Labor Code §1101 and §1102.

3. Investigation of Claims

Consultant must designate a specific position within its organization to be responsible for investigating allegations of non-compliance with the anti-discrimination and anti-harassment provisions of this Agreement. Consultant must conduct a fair, prompt, and thorough investigation of all allegations directed to Consultant by Valley Water. In cases where such investigation results in a finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective action against the offender.

SECTION TWELVE

MISCELLANEOUS PROVISIONS

1. Entire Agreement

This Agreement, which includes the Terms and Conditions, Appendices, the Schedule(s), Attachments to the Schedule(s), and all executed Task Orders, represents the entire understanding between the Parties hereto relating to the Services described in this Agreement and supersedes any and all prior proposals or agreements, whether written or oral, that may exist between the Parties. This Agreement may not be modified or amended except in writing as stated herein. To the extent that any Schedule conflicts with this Agreement, this Agreement shall control.

2. Formation of Agreement

- A. No agreement between the Parties is formed until all applicable actions have been completed to the satisfaction of Valley Water. Valley Water Project Manager will not issue a Notice to Proceed until all required documents have been submitted and accepted by Valley Water.
- B. Formation of this Agreement between the Parties requires accomplishment of the following, as applicable:
 - 1) Execution of the Agreement by Consultant;
 - 2) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required insurance coverages and documents;
 - 3) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required Form 700 documents, if applicable;
 - 4) Submission by the Consultant, and acceptance by Valley Water, of all required Non-Disclosure Agreements (NDA) as provided in the Schedule(s), Attachment Four, Reference Materials, if applicable;
 - 5) Submission by the Consultant, and acceptance by Valley Water, of a Health and Safety Plan, if applicable;
 - 6) Any other requirements that are deemed necessary by Valley Water; and
 - 7) Execution of the Agreement by Valley Water.

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3. No Assignment

- A. The expertise and experience of Consultant are material considerations for Valley Water's award and execution of this Agreement. Consultant will not assign or transfer any interest in this Agreement nor the performance of any of Consultant obligations hereunder, without prior written consent of Valley Water in the form of an amendment executed by the Parties, and any attempt to so assign this Agreement, or any rights, duties or obligations arising hereunder, will be void and of no effect. Any assignment of monies due or to become due in accordance with this Agreement, will be to the extent permitted by law, and will be subject to all proper set-offs, deductions, and withholdings in favor of Valley Water.
- B. In no event shall an assignment of any interest in this Agreement release the Consultant from its duties and responsibilities as described in this Agreement nor shall the Consultant be released from liability created by the provision of Services as described in this Agreement until such assignment takes effect. Any attempted or purported assignment without Valley Water's written consent in the form of an amendment executed by the Parties is null and void.

4. Reasonableness

Discretionary actions or approvals to be performed by the Parties will be exercised in a reasonable manner.

5. Gifts

Consultant hereby acknowledges that Valley Water policy prohibits the acceptance by Valley Water personnel of gifts of any kind from its contractors, consultants, suppliers or vendors. Consultant shall honor this policy by not sending or bringing gifts to Valley Water.

6. Audits

Consultant agrees that Valley Water and its agent(s) have the right to review, obtain, and copy all records pertaining to performance of this Agreement. Consultant agrees to provide Valley Water and its agent(s) with any relevant information requested, in electronic and hard copy format, at Valley Water's discretion, and will permit Valley Water and its agent(s) access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees (alternatively, by phone at Valley Water's discretion) and inspecting or copying books, records, accounts, computerized records, and other materials that may be relevant to the matter under investigation or subject to audit, such as by a government agency, providing Valley Water with grant funds to pay for Consultant's services for the purpose of determining compliance with this Agreement. Consultant further agrees to maintain such records for a period of three years after final payment as provided for in this Agreement.

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7. Force Majeure

Neither Party will be held responsible for delays caused by acts beyond its control, such as acts of God or public enemies, utility or communication delays, or failures not caused by such Party's negligence or fault, accidents not caused by such Party's negligence or fault, labor disputes, war, or failure of the other Party to provide data as required pursuant to this Agreement.

8. Binding Effect

This Agreement is binding on the heirs, executors, administrators, successors and assigns of the Parties.

9. Choice of Law and Venue

The Parties agree that this Agreement is to be governed, construed, and enforced in accordance with the laws of the State of California. The Parties also agree that the venue of any litigation arising out of or connected with this Agreement will lie exclusively in the state trial court or Federal District Court located in Santa Clara County in the State of California. The Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

10. Confidentiality

- A. Due to the nature of the services Consultant will provide pursuant to this Agreement, there may be disclosures made to Consultant of detailed information about Valley Water's operations, including on a need-to-know basis information which may be protected from public disclosure by confidentiality laws, the attorney-client privilege, and/or other provisions of law which govern the nature and timing of disclosure of public information.
- B. Consultant understands and acknowledges that Valley Water staff members providing information to the Consultant do so with the understanding that such information will be handled appropriately.
- C. In the event Consultant receives such restricted or confidential information, Consultant will limit access to the information to only those of Consultant's employees, its subcontractors and its Subconsultants authorized by Valley Water to have the information.
- D. Consultant will notify Valley Water immediately of any request by any third party to have access to confidential information and will not disclose the requested information without first receiving express written authorization from Valley Water.
- E. The requirements stated herein will survive completion, expiration, suspension, and termination of this Agreement.

11. Release of Information Prohibited

Consultant is not permitted to provide any information concerning the Project to the media nor anyone other than authorized Valley Water personnel. Consultant will not release any information pertinent to the Project for publication, public disclosure, or in any other manner without first obtaining clearance and a release in writing from Valley Water. Any media inquiry at any time to Consultant relating to any matter concerning Services provided or requested to be provided pursuant to this Agreement will be referred immediately to Valley Water. Consultant will not communicate with the media regarding any such matter.

12. Conflict of Interest

- A. Consultant represents that there exists no actual or potential conflict of interest concerning the services to be performed pursuant to this Agreement.
- B. Consultant represents that Consultant's performance required as stated in this Agreement does not require the breach of any agreement or obligation to keep in confidence the proprietary information of another party. Consultant will not bring to Valley Water, or use in the performance of Consultant's duties as described in this Agreement, any materials or documents of another party considered confidential or proprietary unless Consultant has obtained written authorization from such party, and the informed consent of Valley Water, for the possession and use of such materials.
- C. Consultant represents and warrants that during the term of the Agreement, Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant shall not act as a Consultant or expert for any party in support of any potential or active claim or legal action against Valley Water by such party.
- D. CALIFORNIA FAIR POLITICAL PRACTICES COMMISSION STATEMENT OF ECONOMIC INTEREST FORM 700 ("FORM 700"): Upon Valley Water's request, Consultant employees, officers, agents, Subconsultants, and subcontractors shall complete, execute, and submit a Form 700 as follows:
 - 1) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, shall file, in a manner prescribed by Valley Water, an Assuming Office Statement. The Assuming Office Statement shall be filed:
 - a. Within 30 calendar days of the effective date of this Agreement; or
 - b. Within 30 calendar days of Consultant hiring, adding, or promoting to a designated filer position, employees, officers, agents, Subconsultants, and subcontractors to perform services pursuant to this Agreement.
 - 2) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file in a manner prescribed by Valley Water, an amendment to their Form 700 any time there is a change to their disclosure information.

- 3) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file an Annual Statement in a manner prescribed by Valley Water, during Valley Water's annual filing season, as determined by Valley Water;
- 4) Consultant employees, officers, agents, Subconsultants, and subcontractors assigned to perform services pursuant to this Agreement, that filed an Assuming Office Statement, shall file, in a manner prescribed by Valley Water, a Leaving Office Statement with Valley Water when one of the following occurs:
 - a. Upon termination of this Agreement; or
 - b. Within 30 calendar days of Consultant employees, officers, agents, Subconsultants, and subcontractors vacating a designated filing position (i.e., removed from the Project, promotion, demotion, transfer to non-designated position, end of employment, or as a result of changes in designated filer positions in Valley Water's Conflict of Interest Code).
- 5) Consultant understands and agrees that its employees, officers, agents, Subconsultants, and subcontractors may be disqualified from providing services to Valley Water pursuant to the California Political Reform Act, Government Code (GC) §81000 et. Seq. and GC §1090. If any of Consultant's employees, officers, agents, Subconsultants, and subcontractors are disqualified from providing services, on written notice from Valley Water Project Manager, Consultant will have 15 calendar days to remove said employee(s), officer(s), agent(s), Subconsultant(s)' and subcontractor(s)' employee(s) from the Project and provide a replacement acceptable to Valley Water.
- 6) The failure of Consultant's employees, officers, agents, Subconsultants, and subcontractors to file an Assuming Office, Annual, Amended, or Leaving Office Statement within the time prescribed by Valley Water is deemed a material breach and may result in termination of the Agreement for cause.

13. Task Orders

- A. Some tasks and Services will be assigned to the Consultant through issuance of Task Orders. After the tasks and Services are identified and communicated to the Consultant by Valley Water Project Manager, Consultant will prepare a proposed Task Order (see Standard Consultant Agreement, Appendix Three, Task Order Template). The proposed Task must identify the following:
 - 1) Description of the services, including deliverables;
 - 2) The total Not-to-Exceed Fees for Consultant to complete the services, including estimated number of hours per assigned staff to complete the services;
 - 3) Proposed staff that will be assigned to complete the services, including resumes if not previously provided to Valley Water's Project Manager;

- 4) Estimated cost of each other direct cost and reimbursable expense, including any applicable fees;
 - 5) Schedule for completing the services; and
 - 6) Copies of applicable state and federal permits required to complete the services, unless previously provided to Valley Water.
- B. Consultant agrees that the Not-to-Exceed Fees specified in a proposed Task Order will be the product of a good faith effort in exercising its professional judgment. After an agreement has been reached on the negotiable items, the finalized Task Order will be signed by both Valley Water's authorized representative referenced in the Standard Consultant Agreement, Appendix One, Additional Legal Terms, and Consultant's authorized representative.
- C. Consultant must not commence performance of work or services on a Task Order until it has been approved by Valley Water's authorized representative and Notice to Proceed has been issued by Valley Water Project Manager. No payment will be made for any services performed prior to approval or after the period of performance of the Task Order. The period of performance for Task Orders will be in accordance with dates specified in the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement. The total amount payable by Valley Water for an individual Task Order will not exceed the amount agreed to in the Task Order.
- D. Prevailing Wage Requirements: The Scope of Services may be considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See the Standard Consultant Agreement, Section Four, Fees and Payments, subsection 3. Prevailing Wages, and Appendix Three, Task Order Template.

14. Good Neighbor

Valley Water always strives to be a good neighbor to the community adjacent to its facilities. Consultant will ensure that disturbance to neighbors is minimized. Consultant, its staff, and Subconsultants will always interact with the members of the public in a polite and professional manner.

15. Governmental Permits and Notifications

Unless otherwise expressly stated herein or in an executed Task Order, Consultant represents and warrants that it has investigated the need for, and has or will procure, at its cost, and in its own name to the extent allowed by law, all governmental permits, notifications, approvals and inspections required for the performance of the Services. Consultant shall promptly notify Valley Water if any such permit or approval lapses or is modified or revoked. If, pursuant to applicable law, any such permits or approvals must be procured in Valley Water's name, Consultant shall promptly so inform Valley Water and assist Valley Water in obtaining such permits or approvals.

16. Taxes and Benefits

Consultant has full and exclusive liability for the payment of, and Consultant will pay, any and all taxes and contributions for unemployment insurance, retirement benefits, workers' compensation insurance or benefits, life insurance, pensions, annuities and similar benefits and any other employment-related costs, obligations, and duties that may now or hereafter be imposed by law, collective bargaining agreements or otherwise with respect to persons employed by Consultant for the performance of Services pursuant to this Agreement.

17. Nonwaiver of Rights

The failure of either Party to this Agreement to object to or to take affirmative action with respect to any conduct of the other Party that is in violation of the terms of this Agreement will not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.

18. Notices

Unless otherwise specified in this Agreement, all requests for written approval or legal notices must be sent to the representatives below. All notices are deemed to have been given when made in writing and when delivered or mailed to the representatives of Valley Water and Consultant at their respective addresses as follows:

VALLEY WATER:

Deputy Operating Officer, as listed in Section 1. Representatives, of the attached Schedule(s), Scope of Services

CONSULTANT:

Consultant Principal Officer, as listed in Section 1. Representatives, of the attached Schedule(s), Scope of Services

19. No Third-Party Beneficiaries

Nothing in this Agreement, whether express or implied, shall be construed to give any person or entity, other than the Parties hereto, any legal or equitable right, remedy, or claim under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

20. Severability

If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.

21. Debt Limitation

This Agreement is contingent on the appropriation of sufficient funding by Valley Water for the services described in this Agreement. Valley Water is subject to laws or policies which limit its ability to incur debt in future years. Nothing in this Agreement shall constitute an obligation of future legislative bodies of Valley Water to appropriate funds for purposes of this Agreement.

22. Appendices

The following listed Standard Consultant Agreement Appendices are incorporated herein by this reference as though set forth in full:

Appendix One - Additional Legal Terms
 Appendix Two - Dispute Resolution
 Appendix Three - Task Order Template
 Appendix Four - Insurance Requirements

23. Schedule(s) and Attachments

Schedule P, Scope of Services, and the following listed Attachments are incorporated herein by this reference as though set forth in full:

Attachment One - Fees and Payments
 Attachment Two - Schedule of Completion
 Attachment Three - Consultant's Key Staff and Subconsultants
 Attachment Four - Reference Materials

IN WITNESS WHEREOF, THE PARTIES HAVE SET FORTH BELOW THEIR CONSENT TO THE TERMS AND CONDITIONS OF THIS AGREEMENT THROUGH THE SIGNATURES OF THEIR DULY AUTHORIZED REPRESENTATIVES.

SANTA CLARA VALLEY WATER DISTRICT
 Valley Water

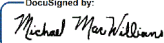
By: _____
 John L. Varela
 Chair Pro Tem
 Board of Directors

Date: _____

ATTEST:

 Michele L. King, CMC
 Clerk, Board of Directors

ANCHOR QEA, LLC
 Consultant

By:  _____
 Michael MacWilliams, PhD, PE
 Authorized Signatory, Principal
 Engineer

Date: 8/18/2022

Consultant's Address:
 1201 Third Avenue, Suite 2600
 Seattle, WA 98101

**STANDARD CONSULTANT AGREEMENT
APPENDIX ONE
ADDITIONAL LEGAL TERMS**

1. Conflict of Interest for Future Services

Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant, shall not submit a proposal independently or as part of a team:

- A. For any agreement to be awarded for CEQA/NEPA-related services, modeling, permitting, design, construction management, or the construction of the Calabazas/San Tomas Aquino Creek-Marsh Connection Project (Project) or any other project that is related to the Services provided pursuant to this Agreement.
- B. Subconsultants working for the Consultant on this project are similarly precluded from proposing to, or performing services pursuant to future modeling, CEQA/NEPA, permitting, design, construction and construction management agreements with Valley Water if their services performed pursuant to this Agreement for Planning and Monitoring include any of the three (3) scopes listed below.
 - 1) formulation or modification of conceptual alternatives, final alternatives, or the staff-recommended alternative;
 - 2) scoring or ranking of conceptual, feasible, or Valley Water (VW) staff-recommended alternatives; or
 - 3) development of design inputs or basis of design for conceptual alternatives, final alternatives, or the VW staff-recommended alternative.
- C. In response to any request for proposal or Valley Water solicitation developed or prepared by or with the assistance of Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant; or
- D. For any single or sole source products/services related to the Services pursuant to this Agreement or have a financial stake in any single or sole source products/services resulting from this Agreement.

2. Dispute Resolution

If a dispute occurs between the Parties as a result of this Agreement, then the Parties agree to use the Dispute Resolution process outlined in the Standard Consultant Agreement, Appendix Two, Dispute Resolution.

3. Small Business Enterprise (SBE) Participation – NOT USED

4. Task Order Approvals

- A. Services to be performed pursuant to a Task Order may only commence once a specific Notice to Proceed for that Task Order has been issued by Valley Water.
- B. Task Orders are subject to approval by Valley Water Deputy Operating Officer unless delegated to an Assistant Officer and/or Unit Manager.

**STANDARD CONSULTANT AGREEMENT
APPENDIX ONE
ADDITIONAL LEGAL TERMS**

- C. Valley Water Unit Manager(s) is authorized to approve individual Task Orders in an amount not-to-exceed \$[authorization amount]. [NOT USED]
- D. The total not-to-exceed amount for any one Task Order shall not exceed \$[NTE Amount]. [NOT USED]

5. California Department of Fish and Wildlife (CDFW) Proposition 1 Watershed Restoration Grant Program Calabazas/San Tomas Aquino Creek – Marsh Connection Project Grant Agreement Requirements

- A. This Agreement is funded by a grant Valley Water received from the California Department of Fish and Wildlife (CDFW) Proposition 1 Watershed Restoration Grant Program Calabazas/San Tomas Aquino Creek – Marsh Connection Project. Pursuant to the Grant Agreement dated November 1, 2021, between, Valley Water and CDFW), Valley Water must include certain provisions in its grant-funded consultant agreements. All such applicable provisions are set forth in Exhibit A, California Department of Fish and Wildlife (CDFW) Proposition 1 Watershed Restoration Grant Program Calabazas/San Tomas Aquino Creek – Marsh Connection Project Grant Agreement Required Provisions, attached hereto and incorporated herein by this reference. Consultant agrees to comply with all CDFW required provisions stated in Exhibit A of this Appendix One.
- B. In the event of a conflict or inconsistency between the Grant Agreement Provisions set forth in Exhibit A, and any other provision in the Standard Consultant Agreement entered into by Valley Water and Consultant, or subsequent amendments thereto, the requirements stated in Exhibit A will control.

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**STANDARD CONSULTANT AGREEMENT
EXHIBIT A
OF
APPENDIX ONE
ADDITIONAL LEGAL TERMS
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) PROPOSITION 1
WATERSHED RESTORATION GRANT PROGRAM CALABAZAS/SAN TOMAS
AQUINO CREEK – MARSH CONNECTION PROJECT
GRANT AGREEMENT REQUIRED PROVISIONS**

1. **Landowner Access.** Consultant must acquire all necessary permits and access permission from landowners where on the ground implementation activities are to be conducted, prior to start of any such work. Consultant must provide all required permits and permission documentation to Valley Water. Valley Water will issue a Notice to Proceed (NTP) for such work once CDFW determines the documentation is adequate to meet the grant requirements.
2. **Reporting**
 - A. **Progress Reports.** Consultant will submit quarterly progress reports to Valley Water as described in the Scope of Services. Progress reports shall contain the following:
 - 1) Activities and tasks performed and/or completed, a summary of progress to date including progress since the last report, and a brief outline of upcoming work scheduled for the subsequent quarter;
 - 2) Documentation of all subconsultant activities
 - 3) Updates on progress towards meeting Project objectives, output and outcome performance measures;
 - 4) Document delivery of any intermediate work products;
 - 5) Costs incurred during the subject period, total of costs incurred to date, and the remaining balance;
 - 6) Any problems encountered while performing the tasks and proposed solutions, timeline for resolution, and status of previously unresolved problems; and
 - 7) Quarterly reports must be submitted using the progress reports template provided by Valley Water.
 - B. **Draft and Final Progress Report:** Consultant will submit quarterly progress reports to Valley Water as described in the Scope of Services. Summary of the life of the grant agreement and description of the work and results pursuant to the CDFW Grant Agreement.
3. **Audit.** Consultant agrees that CDFW, the Department of Finance (DOF), Department of General Services (DGS), California State Auditor's Office (CSA), or their designated representatives shall have the right to review and to copy any records and supporting documentation related to the performance of this agreement. Consultant agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated. Consultant agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Consultant agrees to put a substantially similar term in any subconsultant agreement executes with

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CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) PROPOSITION 1
WATERSHED RESTORATION GRANT PROGRAM CALABAZAS/SAN TOMAS
AQUINO CREEK – MARSH CONNECTION PROJECT
GRANT AGREEMENT REQUIRED PROVISIONS**

another entity related to the performance of this agreement.

- 4. Indemnification.** In addition to Consultant's indemnification obligations to Valley Water under Section 8 of this Agreement, Consultant also agrees to indemnify, defend, and save harmless the State of California ("State") and CDFW and their officers, agents, and employees from any and all claims and losses accruing or resulting to any and all subcontractors, suppliers, laborers, and any other person, firm, or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm, or corporation who may be injured or damaged by Consultant in the performance of this Agreement.
- 5. Independent Contractor.** Consultant, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of CDFW or Valley Water. Consultant acknowledges and promises that CDFW is not acting as an employer to any individuals furnishing services or work on the Project pursuant to this Agreement.
- 6. Non-Discrimination.** Valley Water is an equal opportunity employer and requires its consultants to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Agreement, Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including apprenticeship), or against any other person, on the basis of sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.

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**STANDARD CONSULTANT AGREEMENT
EXHIBIT A
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APPENDIX ONE
ADDITIONAL LEGAL TERMS
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) PROPOSITION 1
WATERSHED RESTORATION GRANT PROGRAM CALABAZAS/SAN TOMAS
AQUINO CREEK – MARSH CONNECTION PROJECT
GRANT AGREEMENT REQUIRED PROVISIONS**

- 7. Rights In Data.** Consultant agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this Agreement, are subject to the rights of CDFW as set forth in this agreement. CDFW shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so. If any such work is copyrightable, Consultant may copyright the same, except that, as to any work which is copyrighted by Consultant, CDFW reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so.
- 8. Use of Subconsultant(s).** If Consultant wishes to accomplish part of the Project through the use of one or more subconsultants, the following conditions must be met:
- A. Consultant shall submit any subconsultant agreements to Valley Water, upon request;
 - B. Agreements between the Consultant and subconsultant must be in writing;
 - C. Consultant must include language establishing the audit rights of CDFW, DOF, DGS, CSA, or their designated representatives with respect to subconsultants that complies with Section 6, Non-Discrimination;
 - D. Subconsultant agreements must include non-discrimination clause language with respect to subconsultants that complies with Section 6, Non-Discrimination; and
 - E. Upon termination of any subconsultant agreement, Valley Water shall be notified immediately, in writing.
- 9. Travel and Per Diem.** If travel or per diem costs are authorized by this Agreement, such costs shall be reasonable and not exceed those amounts identified in the California Department of Human Resources travel reimbursement guidelines. No travel outside the State of California shall be reimbursed unless prior written authorization is obtained from the Valley Water and CDFW.
- 10. Consultant Staff Requirements.** Consultant personnel shall not be employees of or have any contractual relationship with CDFW.
- 11. Equipment Purchases.** For purposes of this Agreement, "Equipment" means tangible personal property having a useful life of four years, and "Major Equipment" means Equipment with a unit cost of \$5,000 or more. The unit cost includes the purchase price plus all costs to acquire, install, and prepare the equipment for its intended use. Consultant may purchase Major Equipment under this Agreement only when a specific type of Major Equipment is listed in the Budget Details and Funding Summary section of this Agreement. This restriction on the purchase of Major Equipment does not include the lease or rental of Major Equipment. Consultant shall own all Equipment purchased under this Agreement; CDFW and Valley Water do not claim title or ownership to such Equipment. Consultant shall keep, and make

**STANDARD CONSULTANT AGREEMENT
EXHIBIT A
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APPENDIX ONE
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CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) PROPOSITION 1
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AQUINO CREEK – MARSH CONNECTION PROJECT
GRANT AGREEMENT REQUIRED PROVISIONS**

available to CDFW upon CDFW's request, appropriate records of all Equipment purchased with Grant Funds. Equipment purchased by Consultant outside the term of this Agreement is not eligible for reimbursement by Valley Water or CDFW under this Agreement. When Consultant submits an invoice to Valley Water for reimbursement of Major Equipment purchase costs, that invoice must include a receipt listing the purchase price of the Major Equipment and the serial number and model number of the Major Equipment. That invoice must also include the location, including street address, where the Major Equipment will be used during the term of this Agreement.

12. Union Organizing. Consultant acknowledges the following:

- a. Grant funds, which are being used to fund this Agreement, shall not be used to assist, promote, or deter union organizing;
- b. If Consultant makes expenditures to assist, promote, or deter union organizing, Consultant will maintain records sufficient to show that no Grant Funds were used for those expenditures and shall provide those records to the Attorney General upon request.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

1. Consultant's Questions and Concerns

Questions regarding the Terms, Conditions, and Services relating to this Agreement will be decided by Valley Water who will furnish the decisions to Consultant in writing within 30 days after receiving a written request from Consultant.

2. Dispute Resolution

A. Alternate Dispute Resolution

Valley Water intends to use Alternate Dispute Resolution (ADR) techniques including partnering and mediation to resolve disputes relating to the Project.

B. Consultant and its Subconsultants are expected to participate in all ADR efforts.

C. The cost of partnering, training facilities, and facilitator will be borne by Valley Water.

3. Negotiations Before and During Mediation

Negotiations to resolve disputes before and during mediation are initiated for settlement purposes only, are confidential, and are not binding unless otherwise agreed by Valley Water and Consultant.

4. Voluntary Mediation

A. Initiation of Mediation

Any Party to a dispute or claim may initiate mediation by notifying the other Party or Parties in writing.

B. Request for Mediation

A request for mediation must contain a brief written statement of the nature of the dispute or claim, and the names, addresses, and phone numbers of all parties to the dispute or claim, and those who will represent them, if any, in the mediation.

C. Selection of Mediator

1) Upon receipt of a written request for mediation, unless otherwise agreed by the Parties, within 14 days, the Parties will confer to select an appropriate mediator agreeable to all Parties.

2) If the Parties cannot agree on a mediator, they hereby agree to accept a mediator appointed by a recognized association such as the American Arbitration Association.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

D. Qualifications of a Mediator

- 1) Any mediator selected must have expertise in the area of the dispute and be knowledgeable in the mediation process.
- 2) No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation.
- 3) Before accepting an appointment, the prospective mediator must disclose any circumstances likely to create a presumption of bias or prevent a prompt meeting with the Parties. Upon receipt of such information, the Parties will confer and decide whether to select another mediator.

E. Vacancies

If any mediator becomes unwilling or unable to serve, another mediator will be selected unless the Parties agree otherwise.

F. Representation

- 1) Any Party may be represented by person(s) of their choice who must have full authority to negotiate.
- 2) The names and addresses of such person(s) must be communicated in writing to both Parties and to the mediator.

G. Time and Place of Mediation

- 1) The mediator will set the time of each mediation session.
- 2) The mediation will be held at a convenient location agreeable to the mediator and the Parties, as determined by the mediator.
- 3) All reasonable efforts will be made by the Parties and the mediator to schedule the first session within 60 days after selection of the mediator.

H. Identification of Matters in Dispute

- 1) Parties shall comply with the process as required by the mediator with regard to providing the mediator with a memorandum setting forth its position with regard to the issues that need to be resolved. At the discretion of the mediator, or otherwise agreed by the Parties, the Parties may mutually exchange such memoranda.
- 2) At the first session, the Parties will be expected to produce all information reasonably required for the Mediator to understand the issue(s) presented. The mediator may require each Party to supplement such information.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

I. Authority of Mediator

- 1) The mediator does not have authority to impose a settlement on the Parties but will attempt to assist the Parties in reaching a satisfactory resolution of their dispute.
- 2) The mediator is authorized to conduct joint and separate meetings with the Parties and to make oral and written recommendations for settlement.
- 3) Whenever necessary, the mediator may also obtain expert advice concerning technical aspects of the dispute, provided the Parties agree and assume the expenses of obtaining such advice. Arrangements for obtaining such advice will be made by the mediator or the Parties, as determined by the mediator.
- 4) The mediator is authorized to end the mediation whenever, in the mediator's judgment, further efforts at mediation would not contribute to a resolution of the dispute between the Parties.

J. Privacy

- 1) Mediation sessions are private.
- 2) The Parties and their representatives may attend mediation sessions.
- 3) Other persons may attend only with the permission of the Parties and with the consent of the mediator.

K. Confidentiality

Except as provided by California or federal law or regulation:

- 1) The mediator will not divulge confidential information disclosed to a mediator by the Parties or by witnesses in the course of the mediation.
- 2) All records, reports, or other documents received by a mediator while serving as mediator, are confidential.
- 3) The mediator must not be compelled to divulge such records or to testify in regard to the mediation in any adversary proceeding or judicial forum.
- 4) The Parties must maintain the confidentiality of the mediation and must not rely on, or introduce as evidence in any arbitration, judicial or other proceedings:
 - a. Views expressed, or suggestions made by the other Party with respect to a possible settlement of the dispute;
 - b. Statements made by the other Party in the course of the mediation proceedings;

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

- c. Proposals made or views expressed by the mediator; and
- d. Whether the other Party had or had not indicated willingness to accept a proposal for settlement made by the mediator.

L. No Stenographic Record

There shall be no stenographic record of the mediation.

M. Termination of Mediation

The mediation shall be terminated:

- 1) By the execution of a Settlement Agreement by the Parties;
- 2) By a written declaration of the mediator to the effect that further efforts at mediation are no longer worthwhile; or
- 3) By a written declaration of a Party or Parties to the effect that the mediation proceedings are terminated.

N. Exclusion of Liability

No mediator shall be a necessary Party in judicial proceedings related to the mediation.

O. Interpretation and Application of These Mediation Provisions

The mediator will interpret and apply these mediation provisions insofar as they relate to the mediator's duties and responsibility.

P. Expenses

- 1) The expenses of witnesses for each Party must be paid by the Party producing the witnesses.
- 2) All other expenses of the mediation, including required travel and other expenses of the mediator, and the expenses of any witness called by the mediator, or the cost of any proofs or expert advice produced at the direct request of the mediator, will be apportioned as the mediator finds appropriate or as otherwise agreed to by the Parties.

5. Compensation for Participation in Mediation

Neither Consultant nor Valley Water is entitled to compensation for time spent in or for negotiations or mediation to resolve questions or disputes between Consultant and Valley Water arising out of this Agreement.

**STANDARD CONSULTANT AGREEMENT
APPENDIX THREE
TASK ORDER TEMPLATE**

Task Order No. _____

Title: _____

Agreement: Standard Consultant Agreement _____ ("Agreement") Between the Santa Clara Valley Water District ("Valley Water") and _____ ("Consultant"), dated _____.

Valley Water: _____

Consultant: _____

Dollar Amount of Task Order: Not-to-Exceed \$ _____

1. Upon full execution of this Task Order No. _____, as set forth in the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 13. Task Orders, and the issuance of a Notice to Proceed by Valley Water Project Manager, the Consultant is hereby authorized to perform the Services described in Attachment A to this Task Order. Any costs incurred, Services performed or expenditures by the Consultant before this Task Order is executed or before the issuance of the Notice to Proceed will be considered outside the contracted Scope of Services and will not be eligible for payment.
2. Both the Scope of Services to be performed and the deliverables to be provided in accordance with this Task Order are described in Attachment A which is attached hereto and incorporated by this reference. Attachment A shall include at a minimum the following:
 - A. The Consultant personnel to be assigned to perform the Services, including resumes if not previously provided to Valley Water;
 - B. The total not-to-exceed fees amount for Consultant to complete the Services, including estimated number of hours required to perform the Services assigned to each Consultant classification;
 - C. Estimated cost of each other direct cost and reimbursable expense, including any applicable fees; and
 - D. The distribution detail for each service, direct cost, and reimbursable expense. This information must be included in the invoice for the services authorized under this task order; and
 - E. Project schedule for completing the Scope of Services.
3. Consultant shall be compensated at fixed fees or at the hourly rates established in Schedule P, Attachment One, Fees and Payments. Consultant agrees that it will provide all equipment, furnish all materials, except as may be otherwise noted in the Attachment A.
4. This Task Order becomes effective on the date of full execution by authorized representatives of the Parties and remains in effect until the earlier of: completion of the tasks set forth in Attachment A; or [expected completion date].

Modeling Support for the Calabazas/San Tomas Aquino Creek
Marsh Connection Project
Standard Consultant Agreement-Capital - Prop 1 Grant CDFW
Ver.: 8/15/22

Agreement No. A4668A / PB File No. VW0122

**STANDARD CONSULTANT AGREEMENT
APPENDIX THREE
TASK ORDER TEMPLATE**

5. Copies of applicable local, state and federal permits required to perform the Services described in Attachment A are attached to this Task Order, unless the Consultant previously provided the appropriate permits to Valley Water.
6. Consultant shall perform all Services described in Attachment A to this Task Order in accordance with the Terms and Conditions of the Agreement.
7. Prevailing Wage Requirements [NOT USED]
 - A. The Scope of Services described in this Task Order is considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See the Standard Consultant Agreement, Section Four, Fees and Payments, subsection 3. Prevailing Wages.
 - B. In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water's Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

8. Signatures:

Signature:

NAME OF CONSULTANT FIRM
[PRINT NAME]
[PRINT TITLE]

DATE

Signature:

SANTA CLARA VALLEY WATER DISTRICT
[PRINT NAME]
[PRINT TITLE]

DATE

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

Please Note: Failure to comply with the instructions below could result in a delay in receiving the Notice to Proceed. The District will not be responsible for time lost or costs incurred due to failure to comply with these requirements. Please note the check-list of documents needed at the end of this Appendix Four Insurance Requirements.

Without limiting the Consultant's indemnification of, or liability to, the Santa Clara Valley Water District ("District" or "Valley Water"), the Consultant must provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions as listed below.

Consultant must provide its insurance broker(s)/agent(s) with a copy of these requirements and warrants that these requirements have been reviewed by Consultant's insurance agent(s) and/or broker(s), who have been instructed by Consultant to procure the insurance coverage required herein.

In addition to certificates, Consultant must furnish District with copies of all original endorsements affecting coverage required by this Appendix. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. **All endorsements and certificates are to be received and approved by District before the Agreement is executed.** In the event of a claim or dispute, District has the right to require Consultant's insurer to provide complete, certified copies of all required pertinent insurance policies, including endorsements affecting the coverage required by this Appendix Four Insurance Requirements document.

If your insurance broker has any questions about the above requirements, please advise him/her to call Mr. David Cahen, District Risk Manager at (408) 630-2213.

Certificates of Insurance

Consultant shall furnish the District with a Certificate of Insurance. The certificates will be issued on a standard ACORD Form.

Consultant shall instruct their insurance broker/agent to submit all insurance certificates and required notices electronically in PDF format to the designated District Contract Administrator and email a copy to valleywater@ebix.com.

The certificates will:

1. Identify the underwriters, the types of insurance, the insurance limits, the deductibles and the policy term;
2. Include copies of all the actual policy endorsements required herein; and
3. In the "Certificate Holder" box include:

**Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
Agreement A4668A / PB No. VW0122**

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

IMPORTANT: The agreement or PB number must be included.

In the Description of Operations/Locations/Vehicles/Special Items Box:

1. Certificate Holder shall be named as Additional Insured (except for Professional Liability);
2. District agreement or project number shall appear;
3. The list of policies scheduled as underlying on the Umbrella policy shall be listed; and
4. Waiver of Subrogation must be indicated as endorsed to all policies.

If Consultant receives any notice that any of the insurance policies required by this Appendix Four Insurance Requirements may be cancelled or coverage reduced for any reason whatsoever, Consultant or insurer shall immediately provide written notice to the designated District Contract Administrator that such insurance policy required by this Appendix Four Insurance Requirements is canceled or coverage is reduced.

Maintenance of Insurance

If Consultant fails to maintain such insurance as is called for herein, District, at its option, may suspend payment for work performed and/or may order Consultant to suspend all Consultant's work at Consultant's expense until a new policy of insurance is in effect.

Renewal of Insurance

Consultant will provide the District with a current Certificate of Insurance and endorsements within thirty (30) business days from the expiration of insurance.

Consultant shall instruct its insurance broker/agent to:

1. Submit all renewals of insurance certificates and required notices electronically in PDF format to: valleywater@ebix.com
2. Provide the following information in the "Certificate Holder" box:

**Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
Agreement A4688A / PB No. VW0122**

IMPORTANT: The agreement or PB number must be included.

Consultant must, at its sole cost and expense, procure and maintain during the entire period of this Agreement the following insurance coverage(s).

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

Required Coverages

1. Commercial General/Business Liability Insurance with coverage as indicated:

\$2,000,000 per occurrence / **\$2,000,000** aggregate limits for bodily injury and property damage

General Liability insurance must include:

- a. Coverage at least as broad as found in standard ISO form CG 00 01.
- b. Contractual Liability expressly including liability assumed under this contract.
- c. If Consultant must be working within fifty (50) feet of a railroad or light rail operation, any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, overpass, underpass, or crossway must be deleted, or a railroad protective policy in the above amounts provided.
- d. Severability of Interest.
- e. Broad Form Property Damage liability.

2. Business Auto Liability Insurance with coverage as indicated:

\$2,000,000 combined single limit for bodily injury and property damage per occurrence, covering all owned, non-owned and hired vehicles.

3. Professional/Errors and Omissions Liability with coverage as indicated:

\$2,000,000 per claim/ **\$2,000,000** aggregate

Professional/Errors and Omission Liability appropriate to the Consultant's profession, and must include:

- a. If coverage contains a deductible, or self-insured retention, it shall not be greater than one hundred thousand dollars (\$100,000) per occurrence/event.
- b. Coverage shall include contractual liability
- c. If coverage is claims-made:
 - i. Certificate of Insurance shall clearly state that the coverage is claims-made.
 - ii. Policy retroactive date must coincide with or precede the Consultant's start of work (including subsequent policies purchased as renewals or replacements).
 - iii. Policy must allow for reporting of circumstances or incidents that might give rise to future claims.
 - iv. Insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract of work.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

4. Workers' Compensation and Employer's Liability Insurance

Statutory California Workers' Compensation coverage covering all work to be performed for the District.

Employer Liability coverage for not less than \$1,000,000 per occurrence.

General Requirements

With respect to all coverages noted above, the following additional requirements apply:

1. **Additional Insured Endorsement(s):** Consultant must provide an additional insured endorsement for Commercial General/Business Liability (for both on-going and completed operations) and Business Automobile liability coverage naming the **Santa Clara Valley Water District, California Department of Fish and Wildlife (CDFW), its Directors, officers, employees, and agents, individually and collectively**, as additional insureds, and must provide coverage for acts, omissions, etc. arising out of the named insureds' activities and work. Other public entities may also be added to the additional insured endorsement as applicable and the Consultant will be notified of such requirement(s) by the District. **NOTE:** This section does not apply to the Workers' Compensation and Professional Liability policies.

(**NOTE:** Additional insured language on the Certificate of Insurance is **NOT** acceptable without a separate endorsement such as Form CG 20 10, CG 2033, CG 2037, or CG 2038. Editions dated 07/04 are not acceptable.)

2. **Primacy Clause:** Consultant will provide evidence (either through the Certificate of Insurance, endorsement or language in the insurance contract) that consultant's insurance is primary with respect to any other insurance which may be carried by the District, its Directors, its officers, agents and employees, and the District's coverage must not be called upon to contribute or share in the loss. **NOTE:** This section does not apply to the Workers' Compensation policies.
3. **Cancellation Clause:** Consultant will provide endorsements for all policies stating that the policy will not be cancelled without 30 days prior notification to the District.
4. **Acceptability of Insurers:** All coverages must be issued by companies admitted to conduct business in the State of California, which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the District's Risk Manager. Non-Admitted companies may be substituted on a very limited basis at the Risk Manager's sole discretion.

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

5. **Self-Insured Retentions or Deductibles:** Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses. Consultant agrees that in the event of a claim they will pay down any agreed upon SIR in a prompt manner as soon as bills are incurred in order to trigger the insurance related to the SIR.
6. **Subconsultants:** The Consultant shall secure and maintain or shall be responsible for ensuring that all subconsultants performing the Contract Services secure and maintain all insurance coverages appropriate to their tier and scope of work in a form and from insurance companies reasonably acceptable to the District.
7. **Amount of Liability not Limited to Amount of Insurance:** The insurance procured by Consultant for the benefit of the District must not be deemed to release or limit any liability of Consultant. Damages recoverable by the District for any liability of Consultant must, in any event, not be limited by the amount of the required insurance coverage.
8. **Coverage to be Occurrence Based:** Except for Professional Liability, all coverage must be occurrence-based coverage. Claims-made coverage is not allowed.
9. **Waiver of Subrogation:** Consultant agrees to waive subrogation against the District to the extent any loss suffered by Consultant is covered by any Commercial General Liability policy, Automobile policy, Workers' Compensation policy described in **Required Coverages** above. Consultant agrees to advise its broker/agent/insurer and agrees to provide evidence (either through the Certificate of Insurance, endorsement or language in the insurance contract) that subrogation has been waived by its insurer.
10. **Non-compliance:** The District reserves the right to withhold payments to the Consultant in the event of material noncompliance with the insurance requirements outlined above.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

CHECK LIST OF DOCUMENTS NEEDED

General Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	

Auto Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	

Umbrella:	A.	Limits (\$)	
	B.	Primacy (Endorsement or policy language)	

Workers Comp:	A.	Limits (\$1,000,000)	
	B.	Waiver of Subrogation (Endorsement or policy language)	
	C.	Cancellation Endorsement	

Professional Liability:	A.	Limits (\$2,000,000)	
	B.	Cancellation Endorsement	

Appendix Four ConsultantGL2AL2PL2_rev. 07.20.20/rev. 8.15.22

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SCHEDULE P SCOPE OF SERVICES

1. Representatives

- A. Valley Water's representatives are as listed below. Unless otherwise provided in this Agreement, all correspondence to Valley Water shall be addressed to Valley Water Project Manager (VWPM).

Judy Nam (Valley Water Project Manager)
Senior Water Resources Specialist Watershed Stewardship Planning Division Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-2747

Email: jnam@valleywater.org

Afshin Rouhani (Valley Water Unit Manager)
Water Policy and Planning Manager Watershed Stewardship Planning Division Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-2616

Email: arouhani@valleywater.org

John Bourgeois (Division Deputy Operating Officer)
Watershed Stewardship and Planning Division Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: 408-630-2990

Email: jbourgeois@valleywater.org

- B. Consultant's Project Manager is as listed below. All Valley Water questions pertaining to this Agreement shall be referred to the Consultant's Project Manager.

Michael MacWilliams (Consultant Project Manager)
Anchor QEA, LLC
Principal Engineer
33 New Montgomery Street, Suite 1210
San Francisco, CA 94105

Phone: 415-361-5154

Email: mmacwilliams@anchorgea.com

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SCHEDULE P SCOPE OF SERVICES

- C. Consultant's Principal Officer for this Agreement is as listed below. As per the Agreement, Section Twelve, subsection 18. Notices, all notices pertaining to this Agreement must be submitted to the Consultant's Principal Officer.

Michael MacWilliams (Consultant Principal Officer)
Principal Engineer/Authorized Signatory 33 New Montgomery Street, Suite 1210
San Francisco, CA 94105

Phone: 415-361-5154

Email: mmacwilliams@anchorgea.com

2. Scope of Services

- A. This Schedule P, Scope of Services describes the professional services to be performed by Consultant for Valley Water's Calabazas/San Tomas Aquino Creek-Marsh Connection Project (Project). Valley Water reserves the right to initiate a new consultant agreement selection process for services for any subsequent phase(s) and/or utilize Valley Water (VW) staff to perform such services.
- B. Consultant will provide Modeling Support for the Various Phase of the Calabazas/San Tomas Aquino Creek-Marsh Connection Project by conducting ecological, hydraulics, hydrodynamics and sediment transport modeling to support of the Calabazas/San Tomas Aquino Creek-Marsh Connection Project. In addition to conducting modeling, the consultant will assess project impacts and benefits in terms of ecological restoration, flood risk and long-term flood protection, changes in maintenance, and changes to water quality. Refer to Standard Consultant Agreement, Appendix One, Additional Legal Terms, Section 1. Conflict of Interest for Future Services.

3. Project Objectives

- A. Ecological restoration/enhancement of tidal marsh, freshwater marsh, and riverine habitat at the project area.
- B. Resilient flood projection that will adapt to projected sea level rise (SLR)
- C. Reduced maintenance needs for lower Calabazas and San Tomas Aquino (STA) Creeks.
- D. Enhanced public access and improved trails.

4. Project Background

- A. The mission of the Santa Clara Valley Water District, now known as Valley Water, is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

Valley Water is a public agency providing water supply, flood protection, and stream stewardship for Santa Clara County. Valley Water manages an integrated water resources system that includes the supply of clean safe water, flood protection and stewardship of streams on behalf of Santa Clara County's 2 million residents. Valley Water effectively manages ten dams and surface water reservoirs, three water treatment

SCHEDULE P SCOPE OF SERVICES

plants, a state-of-the-art water quality laboratory, and more than 275 miles of streams. For information about Valley Water, visit www.valleywater.org.

- B. The A8 Ponds, part of the South Bay Salt Pond Restoration Project (SBSPRP), are located at the southern boundary of San Francisco (SF) Bay and the northern shoreline of Santa Clara County. These former tidal marshes were converted to salt-production ponds and diked off from the Bay over a century ago. Calabazas and STA Creeks, which historically discharged into tidal marshes at the edge of SF Bay, were realigned many years ago to bypass the salt production ponds and discharge directly into Guadalupe Slough and SF Bay. This resulted in unnatural flow lines with sharp bends that reduce hydraulic conveyance capacity and result in deposition of a large amount of sediment in the channels. Valley Water periodically removes the accumulated sediment at great expense to maintain channel capacity and prevent increased flood risks to local development.
- C. Over the last 100+ years, the A8 Ponds have subsided by about 8 feet. As a result, ground surface elevations at the ponds are below the tidal elevation range, and the ponds primarily consist of open water. The establishment of tidal marsh requires ground elevations within the tidal range. A large amount of sediment will be needed to elevate pond bottom elevations to tidal marsh plain elevation, which is necessary to establish marsh vegetation. The Calabazas/STA Creek-Marsh Connection Project (Project) will connect these two creeks to the A8 Ponds, providing sediment needed to foster establishment of tidal marsh at the former salt production ponds. The established tidal marsh is expected to accrete over time, thereby keeping pace with SLR and providing resilient storm protection.
- D. The SBSPRP, being led by the California State Coastal Conservancy (CSCC), in partnership with local, state, and federal agencies, is working to restore 10,000 acres of tidal marsh in South San Francisco Bay. Valley Water has been an active partner in the SBSPRP and a member of its project management team (PMT) since the beginning. As part of Phase 1 management actions, the SBSPRP opened the A8 Ponds to muted tidal action through construction of a variable width notch in the A8 Ponds levee. The ultimate goal is to return the A8 Ponds to full tidal action and establish about 1,440 acres of restored tidal marsh. The Calabazas and STA Creeks Marsh Connection Project will complement the SBSPRP marsh restoration efforts by providing natural sources of sediment needed by the restored A8 Ponds tidal marsh to establish and thrive.
- E. The Calabazas and STA Creeks Marsh Connection Project arose out of a vision effort led by San Francisco Estuary Institute (SFEI) and partially funded by U.S. Environmental Protection Agency (EPA). The project consists of realigning the lower portions of the two creeks to remove sharp bands and improve hydrodynamics of creek flows. The realignment of the creeks would remove the existing connection to Guadalupe Slough and redirect creek flow through a newly constructed breach in the A8 Ponds levee into the ponds. Additional breaches in the A8 Ponds levees will be considered as necessary to provide improved tidal flows, provide increased sediment input from the Bay to accelerate tidal marsh establishment, and prevent increased risk of fish entrainment in the A8 Ponds.

SCHEDULE P SCOPE OF SERVICES

- F. Valley Water completed a Feasibility Study for the Calabazas and STA Creeks Marsh Connection Project in Spring 2021. The study analyzed a range of conceptual approaches and found that connection of the two creeks to the A8 Ponds is feasible. Basic project elements consist of realigning the lower channels of the two creeks and constructing a breach in the A8 Ponds levee to direct creek flow into the A8 Ponds. Additional elements that may increase the effectiveness and amount of ecological benefits achieved by the project include additional breaches of the A8 Ponds levees to promote tidal exchange and prevent increased flood risks, enhancement of habitat at Harvey Marsh (a roughly 50-acre freshwater/brackish marsh adjoining the lower creek channels), and improvements to the Collishaw and Bay Trails, which pass through the project area and provide public coastal access.
- G. The San Francisco Bay Restoration Authority awarded a Measure AA grant in the amount of \$3.37 million grant to Valley Water for planning and design of the Calabazas and STA Creeks Marsh Connection Project. California Department of Fish and Wildlife (CDFW) awarded a Proposition 1 grant in the amount of \$500,000 to Valley Water for the project, for modeling. This modeling work performed by the Consultant will be funded by Proposition 1 grant funds. Therefore, this Agreement includes conditions and provisions passed through to the Consultant, which is required by CDFW as part of the Proposition 1 grant to Valley Water.
- H. The Consultant will conduct hydrodynamics, sediment transport, ecological, and water quality modeling and/or numerical analysis to support the Calabazas and STA Creeks Marsh Connection Project and prepare a summary report. The modeling and/or numerical analysis will assess project consequences in terms of ecological restoration, flood risk and long-term flood protection, decrease in maintenance, water quality, etc.

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SCHEDULE P SCOPE OF SERVICES

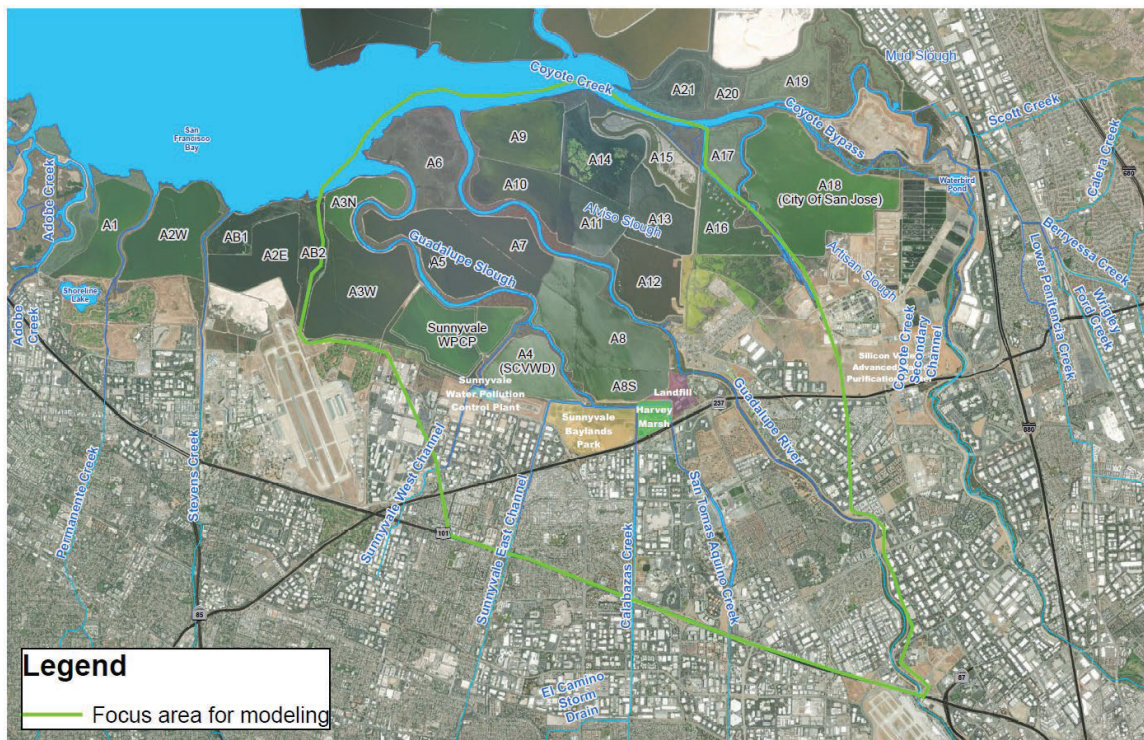


Figure 1- Focus Area for Modeling

- I. The Project objectives include creation of high-quality tidal marsh habitat that does not induce increased flooding risk within the project area. Correspondingly, different modeling and/or numerical studies will need to be conducted to address the project objectives and uncertainties. Seven major Project uncertainties are listed below for completeness. Addressing the uncertainties listed below will require coordination with between the Planning and Monitoring Consultant, Stillwater Sciences (PMC), Modeling Consultant, Anchor QEA, LLC (Consultant), and Valley Water.

Uncertainty 1 - Potential A8 Ponds and Pond A4 Bottom Accretion Rates

- 1) The long-term sediment accretion rate in A8 Ponds and Harvey Marsh due to the proposed breaches in A8 Ponds levees is uncertain, and projections are needed to address the following questions:
 - a. Will A8 Ponds and Harvey Marsh sediment accretion rates be sufficient to raise substantial areas of pond bottoms into the intertidal zone, which is necessary to establish a tidal marsh within Harvey Marsh and/or A8 Ponds?
 - b. Would the rate of marsh accretion be sufficient to offset projected Sea Level Rise (SLR) into the future?
 - c. Will sediment augmentation be needed to meet project objectives?

SCHEDULE P SCOPE OF SERVICES

- 2) Quantify Project's expected tidal marsh habitat benefits.
 - a. Change in quality and quantity of tidal/freshwater marsh, transitional and upland habitats in the A8 ponds and Harvey Marsh
- 3) The same uncertainties about accretion and habitat benefits apply to Pond A4 if it is opened to tidal actions.

Uncertainty 2 - Potential Reduction in Creek Sedimentation

It is expected that the Project will reduce sedimentation in the lower channels of San Tomas Aquino and Calabazas Creeks; and Sunnyvale East and West Channels for a period of time due to transport of sediment and biomass to and deposition in Harvey Marsh, the A8 ponds, and potentially Pond A4 (if opened to tidal actions). Modeling/numerical analysis must address the following:

- 1) Which creek channel reaches will experience degradation and/or aggradation due to the project?
- 2) Will reductions in maintenance (e.g., sediment removal in creeks to maintain channel capacity, bank stabilization and repair) be achieved after the project is constructed?
- 3) How will the sedimentation change during periods of normal tidal cycles and how would it change during storm events with higher flows and/or coastal flooding?
- 4) Change in quality and quantity of riparian habitats in Alviso and Guadalupe Sloughs and lower reaches of the affected creeks

Uncertainty 3 - Potential Mercury Mobilization Risk

- 1) How much legacy mercury will be mobilized due to project construction and consequential scour of pond bottoms and sloughs?
- 2) How would proposed breaches in A8 Ponds levees change the existing sediment transport and deposition and scour patterns in A8 Ponds, Guadalupe Slough, and Alviso Slough? Quantify changes in mercury risks due to changes in the deposition and scour patterns.
- 3) How will the rate of mercury methylation in the A8 Ponds, Guadalupe Slough, and Alviso Slough change?
- 4) How should the feasible alternatives be designed to minimize mercury remobilization risk?
- 5) Any changes in mercury risks if tidal actions are introduced to Pond A4.

Uncertainty 4 - Long-term Potential Changes in Water Quality

- 1) Would the project result in significant changes in water quality of Calabazas and STA creeks, Sunnyvale East Channel, A8 Ponds, Pond A4, and/or Alviso and Guadalupe Sloughs?
- 2) How would changes in water quality parameters, with emphasis on salinity and dissolved oxygen, affect the types and quality of habitats present at the project area?
- 3) Would the project result in significant changes in stormwater quality parameters especially those with Total Maximum Daily Load (TMDL)s or similar designations such as Polychlorinated biphenyls (PCB)s, (Mercury) Hg, Pesticide?

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Uncertainty 5 - Potential Change in Flood Risks

Guadalupe River, San Tomas Aquino Creek and Calabazas Creek all currently have 100-year flood protection meeting FEMA standards that is reflected in FEMA floodplain maps. Sunnyvale East and West Channels have planned flood protection projects which are currently awaiting construction permits. The Shoreline Phase I project is under construction and will provide 100-year coastal flood protection to the area of Alviso east of Guadalupe River and Alviso Slough. Shoreline Phases 2 and 3 are currently in planning and, if implemented, would provide flood protection to areas west of Guadalupe River. Hydraulic modeling will be needed to evaluate future changes in flood risk, whether those changes could affect the FEMA accreditation of levees, and whether tidal marsh established at A8 Ponds (and possibly at Pond A4) will reduce long-term flood risks.

- 1) Will the project increase flooding risk?
- 2) Will the project negatively impact the effective or future FEMA accreditation of existing levee systems or those in construction?
- 3) Will the established tidal marsh help provide long-term flood protection?

Uncertainty 6 – Potential Impacts and Benefits to Existing Special-status Species/Habitat due to Changes in Hydrodynamics and Sediment Patterns

- 1) How would the project change habitats present at the project?
- 2) What would be the potential impacts on existing special-status species and their habitats?
- 3) How could the feasible alternatives be optimized to reduce impacts on existing special-status species and their habitats while maximizing species and habitat benefits?

Uncertainty 7 – Potential Effects on Existing Facilities at the Project Area and Vicinity Owned by Others

The following facilities are present at the project area and could be directly or indirectly affected by the project.

- 1) Power Transmission Towers and Lines owned and operated by PG&E
- 2) Harvey Marsh Wetland Mitigation Area (Caltrans)
- 3) Closed Highway 237 Landfill at America Center (privately owned)
- 4) Bayland Pump Station No. 2, Sunnyvale Pollution Control Plant and Baylands Park, owned and operated by City of Sunnyvale
- 5) A4 Pond, which is owned by Valley Water (water from Pond A4 is pumped into a detention basin which drains via a syphon directly into the A8 Ponds)
- 6) County stormwater storage basin operated by Santa Clara County
- 7) Collishaw Trail, maintained by Clara County Department of Parks and Recreation
- 8) Bay Trail segment, maintained by City of San Jose
- 9) Alviso Marina
- 10) Sunnyvale East Channel

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Modeling/numerical analysis results will need to be leveraged to understand how the facilities listed above might be impacted if the project is implemented, and what mitigating actions may be necessary.

5. Assumptions and Requirements

A. General Assumptions and Requirements

- 1) **Manage Scope of Services.** Consultant shall manage the Scope of Services such that the work is completed within the Not-to-Exceed Fees limit and in accordance with the Project schedule and ensure that all services and deliverables meet Valley Water and Project requirements.
- 2) **Deliverable Format.** Consultant shall submit deliverables in both electronic and hardcopy format If requested. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, AutoCAD files, etc. The hard copy deliverables shall be printed in professional quality presentation, and submitted in 5 (five) copies, if requested. Valley Water may require original copies of signed documents and/or scanned (Adobe PDF) versions.
- 3) **Review of Deliverables.** Valley Water will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by Valley Water, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following Valley Water review process. For each deliverable, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant. The comments provided by Valley Water staff during the workshops will be documented by the Consultant as meeting minutes and will be included in the next revision of the documents.
- 4) **Valley Water Quality Environmental Management System.** Valley Water maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines, and work instructions for the performance of various Valley Water work. If requested, Consultant will perform the applicable Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, the VWPM will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.
- 5) **Consultant Responsibility.** Consultant, with its expertise in performing the Services described herein, is responsible for making the appropriate assumptions in each task to complete each task's deliverables and to achieve the Project objectives of this Agreement as described in Section 3. Project Objectives.
- 6) **Document Control.** Consultant is responsible for establishing and maintaining its own document control system to execute this Scope of Services. An internal document control system for this Project is maintained by Valley Water.

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- 7) **File Exchange Service.** Consultant will provide a file exchange service, accessible to all parties as designated by Valley Water, to facilitate communications; particularly of large files over three megabytes. Difficulties in using and transmitting information with this exchange service shall be resolved by the Consultant. In the event that transmitting or receiving information does not occur in a timely manner, Valley Water will not be responsible for delays in completing Project work. Consultant may need to coordinate with Valley Water's Information Technology Division to address any firewall issues and/or permissions required to allow for these communications.

B. Project-Specific Assumptions and Requirements

- 1) The California State Coastal Conservancy (CSCC) will continue to serve as the lead agency for the South Bay Salt Pond Restoration Project (SBSPRP), supplying an executive project manager, contract services, and considerable funding. It is assumed this will continue through the life of the SBSPRP. Because of the Project proximity and inherent connection to SBSPRP, extensive engagement with partner agencies and stakeholder group of SBSPRP will be required in addition to regulatory agencies, local municipalities and all the adjacent property owners including America Center Maintenance Association, Caltrans, County of Santa Clara, City of Sunnyvale, City of Santa Clara, City of San Jose, and Pacific Gas and Electric (PG&E).
- 2) Valley Water will serve as project lead for implementing the Project, and the SBSPRP team led by CSCC would provide support.
- 3) Close coordination with the consultants performing planning service and data collection and analysis will be required.
- 4) Any numerical model codes or other software developed by or owned by Consultant prior to or independent of the work performed under this Agreement, shall remain in Consultant's sole ownership. Consultant shall make use of certain proprietary information ("Consultant's Proprietary Information") in connection with the performance of the Services. Consultant's Proprietary Information, which includes the UnTRIM model hydrodynamic solver license, the UnTRIM model user interface code, and pre-and post-processing software used for analysis and interpretation of model results, shall remain the exclusive property of the Consultant, and no rights to Consultant's Proprietary Software shall be transferred to any person or entity, including Client by the terms of this Agreement.
- 5) Because the UnTRIM model and the SediMorph models are not open-source software and require a license for use, the model codes and executables for these models will not be provided as part of the deliverables. The full Bay-Delta UnTRIM model grid and full set of input files is a pre-existing proprietary product. Using this well-established hydrodynamic and sediment transport model for this Project results in significant savings for Valley Water, both in terms of project cost and schedule relative to developing and calibrating a new model for the site. Based on the requirements outlined in the RFP, for the area inside the region identified as the focus area for modeling outlined in Figure 1: Project Area, the existing model grid,

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model bathymetry/DEM, and all model input files (bathymetry, flow and sediment flux time series for all inflows, predictions of tidal water levels, salinity, and sediment concentration) along the bayward edge of the focus area for modeling will be provided for the area outlined in Figure 1: Project Area. Note that the boundaries for the input files may deviate from the area shown in Figure 1: Project Area to follow the alignment of the existing grid cells on the focus area boundary but are not expected to be substantially different. For each modeling Deliverable developed using the UnTRIM and SediMorph models, the model bathymetry/DEM and all inputs, relevant outputs, and model parameters within the area outlined in Figure 1: Project Area will be provided in a format that can be imported or reformatted for import readily into other software as required by the CDFW Proposition 1 grant funding and the terms of the RFP and described below for each of these Deliverables in the Scope of Work.

- 6) All input and output for modeling and numerical analyses modeling in the Focus Area for Modeling as listed in the Deliverables for each task must be submitted to Valley Water and may be posted on EcoAtlas or the Valley Water Project Website.
- 7) Consultant shall comply with applicable conditions and provisions of Proposition 1 grant funding from CDFW.
- 8) Technical memos/reports under each deliverable section will include executive summaries and outline of each executive summary to be approved Valley Water prior to the submittal of the draft deliverable.
- 9) The deliverable dates under each task assume that the information needed by the Modeling Consultant, Anchor QEA, LLC (Consultant) from Planning and Monitoring Consultant, Stillwater Sciences, (PMC) and Valley Water to begin each task is available as described in the assumptions for each task. Delays in receiving this information as scheduled may result in corresponding delays in the timeline for deliverables or subsequent tasks.

6. Modeling Tasks

Task 1 - Project Management

The purpose of this task is for Consultant to manage this Scope of Services such that the work is completed within the not-to-exceed fees limit stated in Schedule P, Attachment One, Fees and Payments, and in accordance with the Project Schedule stated in Schedule P, Attachment Two, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet Valley Water and Project requirements.

1.1 Kickoff Meeting

Consultant will attend kickoff meeting with Valley Water. The purpose of the kickoff meeting is to introduce key Valley Water and Consultant team members to one another, acquaint all participants with the purpose of and expectations for the Project, describe team members' roles and responsibilities, describe Project procedures, and summarize scope and schedule. Planning and Monitoring Consultant (PMC) and other select external stakeholders may be invited to this meeting.

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1.2 Project Work Plan. Consultant will prepare a Project Work Plan in accordance with this Scope of Services.

1.2.1 The Project Work Plan shall include Project objectives, requirements, constraints, a detailed Project Schedule (showing major tasks and deliverables), a breakdown of Consultant's costs for the major tasks, a list of the Consultant's team members and their roles and responsibilities, communication protocols (internal and external), document control procedures, and other administrative procedures.

1.2.1 The Project Work Plan shall include a Project Quality Assurance and Quality Control (QA/QC) Plan documenting Consultant's procedures to ensure Consultant's services and deliverables meet Valley Water requirements and accepted practices and standards of the Consultant's profession. Valley Water reserves the right to request and review the Consultant's Project documentation demonstrating its adherence with their own QA/QC procedures.

1.3 Progress Meeting and Workshops. Valley Water and Consultant key staff and subconsultants, as determined necessary and appropriate by Consultant, will be subject to approval by the VW PM. Additionally, at Valley Water's direction, they may be required to coordinate and participate in periodic progress meetings and workshops with Valley Water staff, PMC, external stakeholders, regulatory and resource agencies, and review boards, as needed, to review and discuss the progress of the work. For each meeting or workshop, the Consultant will prepare the meeting agenda and notes and submit them for review by Valley Water. Some progress meeting and workshops may be combined with Valley Water progress meeting and workshops facilitated by PMC.

1.4 Weekly Meetings with Valley Water. The Consultant Project Manager must provide a brief update of the teams work activities completed within the week, look-ahead activities, and issues and actions that may require Valley Water's attention, in a roughly once per week meeting/conference call with the VW PM; frequency and timing of these meetings and calls will be as directed by Valley Water. Some weekly meetings may be combined with Valley Water periodic meetings with PMC.

1.5 Quarterly and Final Progress Reports

1.5.1 Consultant will submit quarterly progress reports to Valley Water containing the following items:

1. Consultant name, project title, agreement number, and period covered by progress report
2. Activities and tasks performed and/or completed
3. Summary of progress to date including progress since the last report,
4. Brief outline of upcoming work scheduled for the subsequent quarter;
5. Documentation of all subconsultant activities
6. Updates on progress towards meeting Project objectives, output and outcome performance measures;
7. Document delivery of any intermediate work products;
8. Costs incurred during the subject period, total of costs incurred to date, and the remaining balance;

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9. Any problems encountered while performing the tasks and proposed solutions, timeline for resolution, and status of previously unresolved problems; and
10. Quarterly reports shall be in electronic format and conform to the templates provided by Valley Water.

1.5.2 Consultant will submit Final Progress Report containing the following items:

1. Summary of the life of the grant agreement and description of the work and results pursuant to the CDFW grant agreement
2. Summary of the Project's accomplishment consistent with the project's objectives pursuant to the CDFW grant agreement
3. Final Progress Report shall conform to the templates provided by Valley Water.

Task 1 Assumptions:

1. Task 1.1 assumes a single kickoff meeting of up to 2 hours. Consultant's project manager, each of Consultant's technical leads, and other key staff will participate in the kickoff meeting. Attendance for non-local staff will be by video conference. Local staff will attend either in-person or remotely as decided in coordination with Valley Water. A Meeting Agenda, Meeting Minutes, and any Presentations from the kick-off meeting will be provided by Consultant to Valley Water.
2. Task 1.2, Project Work Plan, assumes that the Project Work Plan will expand on the information provided in the Scope of Work to provide additional details on the proposed technical approach for Tasks 2, Support Project Planning and 3, Perform Modeling/Numerical Analysis to Inform Design and Address Uncertainties related to Project Long-Term Success. It is assumed that the Project work plan will not deviate significantly from the project approach outlined in the scope of work and described in the workplan submitted in response to the RFP. The estimated level of effort assumes a Draft, Final Draft and Final work plan will be submitted. Changes to the approach from what is described in the Final work plan during the course of the project may require additional cost or schedule changes.
3. Task 1.3, Progress Meeting and Workshops, assumes up to six progress meetings and/or workshops of two (2) hours duration will be held during the planning phase of the Project. These meetings will be attended by Consultant's project manager, as well as the technical leads and other key staff with technical expertise relevant to the topics discussed at each meeting. It is assumed that four of these meetings will be held by video conference and up to two (2) of these meetings will be in person. All attendance for non-local staff will be by video conference. Bay Area staff will attend either in-person or remotely as decided in coordination with Valley Water. A Meeting Agenda, Meeting Minutes, and any Presentations from the will be provided by Consultant to Valley Water for each of the progress meetings and/or workshops if appropriate.
4. Task 1.4, Weekly Meetings with Valley Water, assumes that Consultant's project manager will hold a conference call with the Valley Water project manager on average once per week for the duration of the project. Consultant's estimated level of effort assumes that these calls will be 30 minutes in duration, occurring weekly for 26 months (up to 110 weekly meetings, for a total of a maximum of 55 hours). However, the actual meeting duration and frequency and meeting attendees may vary to meet project needs. E.g., some meetings may be longer or may be skipped, and some will be attended by the PMC. A formal meeting agenda and meeting minutes will not be prepared for regular check in meetings, but action items will be recorded informally by email as needed.

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5. Task 1.5 assumes that Consultant will submit up to 8 quarterly progress reports and a single final progress report, containing the items outlined in Task 1.5, Quarterly and Final Reports.

Task 1 Deliverables:

1. Draft and Final Project Work Plan including QA/QC Plan
2. Kickoff Meeting Agendas, Minutes, and Presentations
3. Six (6) Progress Meeting Agendas, Minutes, and Presentation
4. Action items lists resulting from one hundred and ten (110) Weekly Conference and calls will be at Valley Water's discretion
5. Eight (8) Quarterly Reports and One Final Progress Report

Task 2 - Support Project Planning

The primary focus of Task 2, Support Project Planning, is applying hydrodynamic and sediment transport models to evaluate the set of feasible alternatives (Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models and 2.3, Develop and Evaluate Up to Two Refined Alternatives), select and refine the preferred alternative based on prioritized Project metrics established as part of Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, and quantify the changes in flood risk associated with this alternative (Task 2.4, Perform Additional Hydrodynamic and/or Hydraulic Modeling on VW Staff-Recommended Alternative to Assess Any Increases In Flood Risk Post-Project).

2.1 Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope

- 2.1.1 In coordination with the Planning and Monitoring Consultant (PMC), Valley Water and other Stakeholders, the Consultant will provide necessary support for development and refinement of conceptual and feasible alternatives and prioritization of Project Objectives/metrics which will be used to evaluate and compare Feasible Alternatives. The Consultant will prepare a memorandum describing the modeling and/or numerical analysis approach that will be used to evaluate the extent to which each feasible alternative achieves the prioritized project objectives and also reduces project uncertainties described in Section 4. Project Background. Consultant will conduct a review of past modeling conducted for the Project, participate in two video conference meetings of up to two (2) hours each for this purpose, and prepare a memo summarizing the prioritized project metrics and proposed modeling/numerical analysis approach.
- 2.1.2 Final project metrics which will be used to evaluate and compare feasible alternatives will address, at a minimum, the following (additional metrics may be added as determined necessary):
 1. Areas, quality, and types of habitat (e.g., tidal marsh, open water, ecotone, upland)
 2. Pond bottom accretion in A8 Ponds
 3. Level of Creek maintenance
 4. Mercury mobilization risk
 5. Water quality parameters affecting habitat type and quality (e.g., salinity and dissolved oxygen)

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6. Flooding risk (coastal and riverine)
7. Impacts to existing infrastructure

Task 2.1 Assumptions:

1. Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, support will be limited to review of past modeling and providing input to the planning team; no new modeling is anticipated as part of this task.
2. For each project metric selected, the memo will establish specific model predictions that will be used to quantify the effect of each alternative on these project objectives to establish a basis for selecting the preferred alternative based on the desired project metrics. Where possible, metrics will be quantifiable based on model predictions (e.g., area/volume of scour or deposition in the ponds or creek channels). However, for processes not directly modeled (e.g., dissolved oxygen, mercury methylation, vegetation establishment), qualitative metrics will be established to allow for a relative comparison between alternatives (e.g., higher or lower inundation frequency, higher or lower salinity, etc.).
3. It is assumed that a maximum of ten project metrics will be established to evaluate and compare feasible alternatives.
4. It is assumed that the PMC will be responsible for the development and refinement of conceptual and feasible alternatives and selection of the five feasible alternatives that will be modeled in Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, but the Consultant will provide needed support including preliminary technical analysis such as sediment accretion, flood risk, etc. required for alternative formulation. It is assumed that the PMC will provide the location and geometric details of the five feasible alternatives in an electronic format that sufficient detail that they can be appropriately represented in the hydrodynamic model (i.e., GIS shape files or CAD files). This includes the number, location, inverts, and size of any breaches, pilot channels, horizontal levees, berm lowering, or other elements incorporated into the project design.
5. It is assumed that the PMC will prepare the Meeting Agendas and Meeting Minutes for the three meetings in support of development and evaluation of alternatives. Any presentations presented by the modeling team during these meetings will be provided to the PMC and Valley Water.
6. One of the uncertainties identified for the marsh connection project is mercury remobilization. Mercury remobilization can refer to physical processes that move solids (e.g., scour) containing mercury or to biogeochemical processes (e.g., mercury methylation) that result in mercury being released from solids and transported into water and potentially biota. For physical processes, the hydrodynamic and sediment transport modeling will identify areas of deposition and scour for comparison to available data on mercury concentrations in sediment. Mercury mobilization and mercury methylation will not be explicitly modeled as part of this scope of work.
7. Consideration of remobilization potential for the evaluation of the feasible alternatives in this analysis will be informed by a conceptual model of mercury behavior in tidal marshes that includes these processes where the conceptual model will be developed and refined by PMC. The conceptual model will rely on the large number of studies done in San Francisco Bay, supplemented by studies in other tidal marshes including the Shoreline Conceptual Site Model being developed by H.T Harvey. Together, this information will be considered within the context of the conceptual model being adapted by PMC and will support a

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qualitative evaluation to distinguish among alternatives that are more or less likely to impact methylmercury formation and bioaccumulation. For example, hydrodynamic modeling will also provide information on biogeochemical processes controlling mercury methylation. Salinity and the extent and duration of tidal inundation may be compared among alternatives along with potential areas of tidal and muted tidal open water, mudflats, and marsh habitats.

8. One of the uncertainties identified for the marsh connection project is water quality parameters affecting habitat type and quality, including dissolved oxygen. With the exception of salinity which will be simulated in the hydrodynamic model, no other water quality variables will be directly simulated. The science is not established on exactly how restoration of the A8 Ponds or Pond A4 will affect other aspects of water quality such as dissolved oxygen (DO) or nutrients. Until the science and mechanisms on how the restoration will affect DO are more established, and sufficient water quality data following restoration are available for model calibration, directly modeling nutrient and DO effects of the alternatives is not practical, and we have not included it in our proposed approach. Based on the state of the science, our approach would make inferences based on available water quality monitoring data following previous breaches in the SBSP and changes to hydrodynamics predicted in the modeling conducted for this study. This would be the primary method we would use to assess potential impacts of the restoration on water quality, including the Sunnyvale Water Pollution Control Plant compliance with permit conditions, rather than trying to directly model these water quality effects. Proposed assessment methodologies of potential change in water quality not relying on direct modeling will be documented in the technical memorandum under Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope.
9. Assessing impacts to existing habitats and the potential for creating new habitats under the feasible alternatives will be evaluated primarily based on the physical properties of the habitat such as elevation over time, tidal range, tidal inundation frequency, and salinity. The hydrodynamic and sediment transport modeling proposed for this study is ideally suited for evaluating changes to physical habitat through sediment accretion over both short and long-time scales, changes to inundation frequency, and changes to tidal range.

Task 2.1 Deliverables:

1. Participate in three video conference meetings of up to two (2) hours duration in support of development and evaluation of alternatives.
2. Prepare draft and final technical memorandum describing proposed modeling/numerical analysis scope, including technical approach, types of models/numerical analysis, scenarios, and model/analysis outputs. The memorandum will document the extent to which outputs align with prioritized feasible alternative evaluation metrics and the extent to which they will reduce project uncertainties. The final technical memorandum will address comments from Valley Water, PMC and other stakeholders.
3. Consultant will provide the following Task 2.1 Deliverables to PMC Agreement:
 - a. Modeling approach for representing alternative assessment metrics (Task 2.1) by January 2023

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2.2 Develop and Evaluate Feasible Alternatives & Baseline Models

2.2.1 Purpose: Support evaluation of feasible alternatives as described in the Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, memo.

1. Support PMC and Valley Water in defining up to five feasible alternatives and modeling baseline.
2. Develop models/numerical analyses as described in the approach from Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, for each of the feasible alternatives and the baseline condition (existing condition)- a total of up to six model scenarios
 - a. Models/analyses will be based on and calibrated to best available data.
 - b. More than one type of model or numerical analysis may be run for this Task; however, at a minimum a hydrodynamic/sediment transport model will be developed for the project area.
3. Compare the model/numerical analysis results for the five feasible alternatives to each other and to the baseline/existing condition, using the metrics developed in Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, and document the comparison as needed to support preparation of the Project Planning Phase documents (e.g., problem definition / refined objectives report, project outreach and communications strategy, feasible alternative analysis study, VW staff-recommended alternatives report, planning study report, planning-to-design phase transition report).
4. Prepare a technical memorandum describing the methodology and results of the comparison and evaluation of feasible alternatives.
5. Prepare figures, exhibits, graphs, and tables as needed for use in planning phase documents to be prepared by Valley Water/PMC.
6. Participate in up to two video conference meetings of up to two (2) hours duration with the PMC, Valley Water and possibly other stakeholders to assist with selecting the VW staff-recommended alternative. If no single alternative stands out as the best approach to achieving the project objectives up to two refined alternatives will be evaluated under optional Task 2.3 Develop and Evaluate Up to Two Refined Alternatives.

Task 2.2 Assumptions:

1. Timeframe of hydrodynamic/sediment transport modeling: A single simulation period will be selected to include both normal conditions (tides and low flows) as well as larger flow events, to explore how sedimentation occurs from coastal vs. riverine sources. To allow for efficient evaluation and comparison of the feasible alternatives, the expected evaluation period will be between 3 and 4 months, plus a period of model spin-up, such that the total length of the simulation period will be no more than 12 months.

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2. The Coupled UnTRIM-SWAN-SediMorph model will be applied to evaluate the feasible alternatives under Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models. Because the model has already been extensively calibrated in the Far South Bay, additional model calibration is not planned as part of this study. The simulation of the baseline condition will be used for model validation. Predicted water levels, salinity, suspended sediment concentration, waves, and predicted current speeds will be compared to any available data in the vicinity of the project area to validate the model.
3. One additional hydrodynamic model simulation (not including waves or sediment transport) will be made for the baseline scenario and each of the five feasible alternatives. In this simulation, tracers will be used to evaluate the flushing time of the A8 Ponds and Pond A4, and tagging of the outflows from the Sunnyvale Water Pollution Control Plant (WPCP) will be simulated to compute water age of the outflow from the WPCP in the study area. It is expected that this simulation will be made over the same period of time simulated using the coupled UnTRIM-SWAN-SediMorph model. Due to the additional computational time required for calculations of flushing time and age, these simulations will be conducted using only the hydrodynamic model without the sediment transport and wave models. The same model grids for the baseline scenario and the five feasible alternatives will be used for these simulations. It is assumed that Valley Water will provide the outflows from the Sunnyvale WPCP at either hourly or daily intervals for this simulation.
4. It is assumed that the PMC will provide the location and geometric details of the five feasible alternatives in an electronic format that sufficient detail that they can be appropriately represented in the hydrodynamic model (i.e., GIS shape files, CAD files, or DEMs). This includes the number, location and size of any breaches, pilot channels, horizontal levees, berm lowering, or other elements incorporated into the project design.
5. PMC will provide the following Data Deliverables to Consultant to support Modeling Task 2, Support Project Planning:
 - a. Existing monitoring data inventory (included in PMC Task 5.1 Workplan)
 - b. Existing data for use in model development to be provided after PMC Task 5.1 Workplan (target mid-November). Data may include the following:
 - 1) Historical topographic and bathymetric data, and or seamless DEM encompassing planning area.
 - 2) Available time series data at creek, slough, and pond locations, potentially including precipitation, water level/stage, creek discharge, cross-sectional sediment flux, water quality (DO, Temperature, EC, pH, turbidity).
 - 3) Available sediment characterization data (e.g., grain size) collected during
 - c. Contemporary (Fall 2022) topographic/bathymetric data of planning area (PMC Task 5.2.2) to be provided Dec 2022.
 - d. Sediment accumulation mapping (PMC Task 5.2.3) by topographic differencing (contemporary vs historical) in GIS or CAD to be provided by Feb 2023
 - e. Year 1 time series data at creek, slough, and pond locations, to be delivered Dec 2023, including:
 - 1) Sediment flux measurements in Guadalupe and Alviso sloughs (PMC Task 5.2.4)
 - 2) Water level and turbidity data in Guadalupe River, Calabazas, and STA creeks (PMC Task 5.2.4)
 - 3) Continuous water quality data (DO, Temperature, EC, pH, chlorophyll-a) in Pond A8S, Pond A5, and Guadalupe Slough.

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- f. PMC will provide the following Restoration Project Alternative Deliverables to Consultant to support Modeling Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models:
 1. Alternative assessment metrics selected for modeling (PMC Task 2.1) by December 2022.
 2. Drawings/dimensions for 5 Conceptual Alternatives (PMC Task 2.2) delivered as GIS shop files by February 2023.

Task 2.2 Deliverables:

1. As described in the Project-Specific Assumptions and Requirements, the model input files and boundary conditions inside the region identified as the focus area for modeling outlined in Figure 1: Project Area will be provided in an ASCII text format that can be imported or reformatted for import readily into other software as required by the CDFW Proposition 1 grant funding.
2. Model outputs inside the focus area for modeling outlined in Figure 1: Project Area which are used as project metrics, are used to compare between alternatives, or used for model validation will be provided as a deliverable for each feasible alternative. Model outputs will be provided in ascii text format to allow for readability and allow for the output to be imported or reformatted for import readily into other software. Model output and output formats will be documented in a short memo or appendix.
3. Draft and final technical memorandum describing the model/analysis development, methodology, and results by September 2023. Coordinate with PMC to determine whether this is a standalone report to serve as an appendix to the Planning phase documents, or a section within those documents. The final technical memorandum will address comments from Valley Water, PMC and other stakeholders.
4. Figures, exhibits, graphs, and tables as needed for use in planning phase documents to be prepared by Valley Water/PMC.
6. Consultant will provide the following Task 2.2 Deliverables to the PMC:
 - a. Exported model grids in the Focus Area for modeling for Baseline and 5 Alts in GIS or CAD format (Task 2.2) by June 2023
 - b. Modeling outputs of Baseline and 5 Conceptual Alternatives (Task 2.2) targeting July 2023, potentially including:
 - 1) Map-based exhibits showing areal variations in tidal WSELs (spring/neap), salinity and SSC at high to low tide, vector/color maps of peak velocities.
 - 2) Time series plots of hydrodynamic outputs (WSEL, velocity, bottom velocity, and water quality (EC/salinity, SSC) at index stations in Guadalupe River, Alviso and Guadalupe sloughs, Calabazas and STA creeks, Sunnyvale E-W channels, Ponds A4, A5, A8.
 - 3) Estimates of tidal datums (MHHW, MHW, MTL, MLW, MHHW) at index locations listed in 2b above.

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2.3 Develop and Evaluate Up to Two Refined Alternatives

- 2.3.1 Purpose: This Task 2.3 is intended to refine alternatives rather than create new alternatives from scratch. VW Staff-recommended alternative will also be finalized under Task 2.3, Develop and Evaluate Up to Two Refined Alternatives.
- 2.3.2 Develop models/numerical analyses for up to two refined feasible alternatives, and evaluate the results using the approach from Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope.
- a. Support PMC and Valley Water in defining up to two refined feasible alternatives.
 - b. Develop models/numerical analyses as described in the modeling approach from Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, for each refined feasible alternative
 - c. Modeling/numerical analysis under Task 2.3, Develop and Evaluate Up to Two Refined Alternatives, will either be conducted with open-source software, or, alternatively, the model bathymetry/DEM and all inputs, outputs, and model parameters would be provided in a format that can be imported or reformatted for import readily into other software. This is a requirement of the CDFW Proposition 1 grant funding.
 - d. Compare the model/numerical analysis results for the refined feasible alternatives to each other and baseline/existing condition, using the metrics developed in Task 2.1, Prioritization of Project Metrics, Development of a Modeling and/or Numerical Analysis Scope, and document the comparison as needed to support the Project Study Report (PSR):
 - 1) Documentation will include a technical memo describing the results and also include figures and tables to support the Planning phase documents.
 - e. Participate in up to two video conference meetings of up to two (2) hours duration with the PMC, Valley Water and other stakeholders to assist with selecting a refined feasible alternative which will move forward to become the VW staff-recommended alternative.

Task 2.3 Assumptions:

1. It is assumed that the same timeframe simulated in Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, to evaluate the five feasible alternatives will also be used to evaluate the two refined alternatives.
2. The Coupled UnTRIM-SWAN-SediMorph model will be applied to evaluate the refined alternatives under Task 2.3. No additional model validation or calibration will be conducted as part of Task 2.3.
3. Modeling will support the design optimization by PMC and Valley Water to determine the optimal alignment of the lower reaches of Calabazas and San Tomas Aquino creeks into A8 Ponds, the optimal number of breaches of the A8 Ponds and Pond A4 levees, the optimal locations and geometries of pilot channels, the optimal dimensions of levee breaches, and the optimal locations of levee breaches.

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4. It is assumed that the PMC will provide the location and geometric details of the two refined alternatives in an electronic format that sufficient detail that they can be appropriately represented in the hydrodynamic model (i.e., GIS shape files, CAD files, or DEMs). This includes the number, location and size of any breaches, pilot channels, horizontal levees, berm lowering, or other elements incorporated into the project design.
5. The PMC will provide the following Restoration Project Alternative Deliverables to Consultant to support Modeling Task 2.3:
 - a. Revised drawings/dimensions for any changed alternatives (PMC Task 3.1) by August 2023
 - b. Updated Feasible Alternative Assessment metrics for modeling (PMC Task 3.2) by September 2023
 - c. VW Staff Recommended Alternative (PMC Task 3.3) to Consultant by January 2024

Task 2.3 Deliverables:

1. As described in the Project-Specific Assumptions and Requirements, the model input files and boundary conditions inside region identified as the focus area for modeling outlined in Figure 1: Project Area will be provided in an ascii text format that can be imported or reformatted for import readily into other software as required by the CDFW Proposition 1 grant funding. Model input, input formats and boundary conditions will be documented in a short memo or appendix.
2. Model outputs inside the focus area for modeling outlined in Figure 1; Project Area which are used as project metrics, are used to compare between alternatives, or used for model validation will be provided as a deliverable for each feasible alternative. Model outputs will be provided in ascii text format to allow for readability and allow for the output to be imported or reformatted for import readily into other software. Model output and output formats will be documented in a short memo or appendix.
3. Update to the Task 2.2 technical memorandum describing the models/numerical analyses development and modeling/numerical analyses results for the refined feasible alternatives. Coordinate with PMC to determine whether this will be a standalone report to serve as an appendix to the Planning phase documents, or a section within those documents. The updated memo be expanded version of the memo for Task 2.2 which include comparison of 7 alts and one baseline, but exact format and content to be decided in consultation with PMC and Valley Water. Submit final updated technical memo by February 2024
4. Graphs/plots/tables as required to support project planning and outreach.
5. Consultant will provide the following Task 2.3 Deliverables to PMC:
 - a. Updated model results and additional metrics for refined Feasible Alternatives (Task 2.3) by January 2024.

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2.4 Perform Additional Hydrodynamic and/or Hydraulic Modeling on Valley Water (VW) Staff-Recommended Alternative to Assess Any Increases in Flood Risk Post-Project

- 2.4.1 Purpose: Perform modeling to identify additional project elements that may be needed to prevent the VW Staff Recommended Alternative from increasing or inducing new flooding risk or increasing erosion/scour that might threaten existing flood protection elements such as levees or ecotone. The PMC and Valley Water would be involved with identifying the needed elements for this task. This task may be iterative in nature if the new project elements and/or mitigation solutions impact the floodplain negatively (e.g., due to backwater effects).
- 2.4.2 Perform hydrodynamic and/or hydraulic modeling to analyze the effect of VW staff recommended alternatives on Federal Emergency Management Agency (FEMA) accreditation of existing or in construction levee systems. The analysis will quantify the effect of the VW Staff Recommended Alternative on peak water surface elevations levels (WSELs) from various events including both large coastal and riverine flood events considering not only peak WSELs level but also duration of peak WSELs, potential shoreline erosion and other factors that may affect food risk. It will also address factors that may increase threats to existing or proposed flood protection elements, such as the increased risk of erosion due to waves or increased velocity that may occur at smaller flows. As noted above, the Consultant, PMC and Valley Water would work together to develop mitigation elements. The modeling will also address the following:
- a. Need for additional flood protection elements within the Project area necessary to provide protection against 100-year coastal flooding event if Shoreline Project Phases 2 and 3 are delayed past the expected project implementation time frame.
 - b. Would the VW staff-recommended alternative induce new or increased flood risks during large flow events? If so, how could they be mitigated with new flood protection features (e.g., new or modified levees)?
 - c. Would the VW staff-recommended alternative result in threats to the existing FEMA flood protection features during 100-year flow events? If so, work with PMC to identify flood mitigation solutions.
 - d. Would the VW staff-recommended alternative create new pathways for flood flows (e.g., via overtopping into Pond A4, filling it, and then overtopping its lower south levee to flood adjacent developed areas in Sunnyvale)? If so, work with PMC to identify flood mitigation solutions.
 - e. Would the VW staff recommended alternative lead to increased risks of failure of any flood protection elements, e.g., through increased risk of levee erosion? If so, work with PMC to identify flood mitigation solutions.

Task 2.4 Assumptions:

1. The Hydrologic Engineering Center's (HEC) River Analysis System (RAS) (HEC-RAS) model will be applied to evaluate flood risk for Task 2.4. HEC-RAS is one of the most widely used FEMA-approved models available for the evaluation of 100-year water levels.
2. Existing HEC-RAS 1D models are available and will be provided by Valley Water for Calabazas Creek, STA Creek, Sunnyvale East Creek, and Guadalupe River.

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3. The existing HEC-RAS 1D models for Calabazas Creek, STA Creek, Sunnyvale East Creek, and Guadalupe River will be connected to a 2D mesh spanning the A8 Ponds and the downstream portions of Guadalupe Slough and Alviso Slough.
4. The downstream boundary for the 2D portion of the HEC-RAS model will be at the mouths of Alviso Slough and Guadalupe Slough.
5. Valley Water will provide the water level calibration data for the HEC-RAS 1D models for Calabazas Creek, STA Creek, Sunnyvale East Creek, and Guadalupe River.
6. The combined 1D/2D HEC-RAS model will be calibrated to the same water level calibration data used to calibrate for the HEC-RAS 1D models of these streams. The predicted water levels for the 100-year flows in the combined 1D/2D HEC-RAS model will be compared to the predicted water levels in the existing 1D HEC-RAS models for model validation and calibrated to available high-water marks and other relevant water level records.
7. The HEC-RAS model will not be used to simulate water levels only and will not be used to simulate sediment transport.
8. Model must be calibrated to address fluvial and coastal flood events.
9. Model boundaries and geometries are to be determined in consultation with VW and the PMC, but will likely include Alviso and Guadalupe Sloughs and all flanking ponds, lower reaches of Guadalupe River, Calabaza Creek, San Tomas Aquino Creek, and Sunnyvale East and Sunnyvale West channels. The model area must be large enough to capture all major flooding risks (e.g., overtopping of lower creek reaches, successive overtopping of ponds).
9. A maximum of five Flow Scenarios will be analyzed using the HEC-RAS model. It is expected that these five scenarios will likely include the following scenarios, or similar scenarios selected by Valley Water:
 - a. 100-year event on Guadalupe River and smaller flows (tbd) on West Valley Watershed creeks, concurrent with spring tide conditions
 - b. 100-year events on the West Valley Watershed creeks with a smaller flow event on Guadalupe River, concurrent with spring tides
 - c. 100-year coastal flooding event, concurrent with smaller flows on all creeks in the vicinity 10-year riverine flow event on Guadalupe River and smaller flows (tbd) on West Valley Watershed creeks, concurrent with spring tide conditions
 - d. 100-year coastal flooding event, concurrent with 10-year riverine flow events on the West Valley Watershed creeks (Sunnyvale West Channel, Sunnyvale East Channel, Calabazas Creek and San Tomas Aquino Creek) with a smaller flow event (to be determined in discussion with Valley Water) on Guadalupe River, concurrent with spring tides
 - e. 100-year coastal flooding event, concurrent with smaller flow on all creeks in the project vicinity. The flows will be determined through discussions among Valley Water, the Consultant and PMC.
10. The budget for this task assumes that the five flow scenarios will be simulated for the VW staff recommended alternative identified following the completion of Task 2.3. Additional iterations on new project elements and/or mitigation solutions or on the details of the flow scenarios would be covered under the optional tasks.

Task 2.4 Deliverables:

1. Draft and final technical memorandum including comparison of refined feasible alternatives to each other and to existing/baseline conditions and detailed flood risk analysis of VW staff - recommended alternative. The final memorandum will address comments from Valley Water, PMC, and other stakeholders.

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2. HEC-RAS is not an open-source model (because the source code is not available); however, the model itself is publicly available for download from HEC. All model input and output files for the HEC-RAS simulations conducted for this Task will be provided to Valley Water. These files will be usable using the current release of the HEC-RAS software.
3. Presentation of modeling results at one video conference meeting of up to two (2) hours duration with external stakeholders and either in-person or by video conference at a Valley Water Board of Directors meeting of up to two (2) hours in duration. Consultant presentation at Valley Water Board of Directors meeting will have strong emphasis on results from hydraulic modeling including comparison of floodplain under current FEMA map and floodplain with VW staff-recommended alternative in place.
4. Consultant will provide the following Task 2.4 Deliverables to PMC:
 - a. Flood risk modeling of VW Staff Recommended Alternative (Task 2.4) under current conditions by May 2024

Task 3 - Perform Modeling/Numerical Analysis to Inform Design and Address Uncertainties related to Project Long-term Success

3.1 Detailed pond bottom accretion and/or tidal marsh establishment modeling of VW Staff-Recommended Alternative, analysis of potential habitat changes, and projection of future maintenance levels at Harvey Marsh and lower reaches of Calabazas and STA creeks; and Sunnyvale East/West Channels

- 3.1.1 Purpose: Building on the Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, modeling/numerical analysis, perform additional, more detailed modeling/numerical analysis of the VW Staff-Recommended Alternative to determine the timeframe over which pond bottom accretion and tidal marsh establishment is expected to occur, considering expected sea-level rise (SLR). Analyze whether artificial sediment augmentation would be required to create substantial amounts of tidal marsh at the A8 Ponds. In addition, the modeling will support design optimization for the VW staff-recommended alternative.
- 3.1.2 Conduct marsh accretion and ecological modeling/numerical analysis to determine the feasibility of successfully establishing a long-term resilient tidal marsh within the A8 ponds and Pond A4, considering the following uncertainties:
 - a. What is the expected rate and timeframe over which sediment accretion at A8 Ponds and Pond A4 is expected to occur?
 - b. Will expected change in pond bottom elevation lift and maintain the pond bottom into the tidal range, considering expected SLR, to support establishment of tidal marsh?
 - c. Once tidal marsh elevations are attained, how will biological processes contribute to the accretion rate and the ability of the marsh plane to keep up with SLR? What biological feedback processes will be included?
 - d. What acreage of tidal marsh do we expect to establish at selected future points in time, considering connectivity to tidal flows?
 - e. How will the back of tidal marsh habitat change over time, based on the age of the marsh, expected plant composition, drainage network development, and proximity to ecotone and refugia?
 - f. How will the model take into account sediment input from fluvial process?

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- 3.1.3 Analyze the expected changes in habitat type, acreage, and quality that would occur at Harvey Marsh and the lower reaches of Calabazas and San Tomas Aquino creeks; and Sunnyvale East/West Channels using elevation, salinity, and inundation frequency and others based on consultation with PMC if the VW staff-recommended alternative is implemented.
- 3.1.4 Quantitatively project the long-term level of maintenance, including sediment removal (cy/year) and bank stabilization repair, expected at the lower reaches of Calabazas and San Tomas Aquino creeks if the VW staff-recommended alternative is implemented, and compare to historic levels of creek maintenance activities.

Task 3.1 Assumptions:

1. The Wetland Accretion Rate Model for Ecosystem Resilience (WARMER) model will be applied to evaluate long-term accretion within the A8 Ponds and Pond A4 for VW staff-recommended alternative and assess the resulting habitat under future conditions.
2. The assumed level of effort assumes that the calibrated version of the WARMER model published by Swanson et al (2015) and used in the EIA 1-10 study for Valley Water will be used for this study. If a different version of the WARMER model is preferred by Valley Water (i.e., WARMER 2.0) and can be provided to Consultant, an alternate version of WARMER could be used if it is made available prior to the start of Task 3 and does not require any additional model parameters or calibration as part of this project.
3. WARMER incorporates both biological and physical processes that result in vertical marsh accretion. The processes incorporated into the model specifically include below-ground processes such as root growth, compaction and decay. As the marsh elevation changes over time relative to sea level, the rate of organic matter accumulation in the WARMER model varies as a function of elevation to account for the changing productivity of vegetation as it is established.
4. WARMER by itself accounts only for sediment input from Bay sediments, based on ambient Bay sediment concentrations, and does not have a mechanistic way to separately account for an increase in incoming inorganic creek sediment due to the realignment of San Tomas and Calabazas Creeks. However, projections of sediment accretion at A8 ponds and Pond A4 from the short-term 3D sediment transport simulations conducted in Task 2, Support Project Planning, will be used as additional inputs into the modeling/numerical analysis of tidal marsh establishment in the WARMER model. To accomplish this the inorganic sediment originating in the upstream tributaries which is predicted to be deposited inside the A8 Ponds and Pond A4 from the sediment model simulations conducted in Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models and 2.3 will be scaled (the exact scaling procedure may require some iteration) and added to the marsh accretion predicted using WARMER at intervals through time. Through this approach the predicted year 50 marsh surface will include the effects of both deposition of creek sediment and marsh accretion over the time horizon evaluated. Consultant will work with Valley Water and other modeling experts to refine the aforementioned scaling approach to incorporate the short-term Hydrodynamic modeling results of inorganic sediment deposition into the longer-term WARMER modeling.
5. The time frame for analysis will be 50 years after project construction, with interim outcomes determined at 10-year intervals within the 50-year period.

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6. Evaluation of the habitat conditions will be conducted for the 50-year horizon and each ten-year interval. This habitat evaluation will be based purely on elevation, relative to the tidal datums at each time horizon. For example, MHHW and MLLW will be at a different elevation relative to NAVD88 at each time horizon, however habitat within specific elevation bands relative to the tidal datums (e.g., below MLLW, MLLW to MTL, MTL to MHHW, Above MHHW) can be evaluated at each time interval to calculate areas of habitat within the ponds within these ecologically relevant elevation bands through time. This elevation-based habitat assessment will be used to compare habitat conditions to existing conditions/baseline and to each ten-year interval outcome over the 50-year period.
7. This task assumes that a single SLR curve is used in the development of the marsh surface using WARMER and in the subsequent evaluation of sediment deposition and erosion under future conditions. Since this surface will also be used to evaluate future flood risk in Task 3.2, Long Term Flood Risk Assessment and Attenuation Benefit, it is recommended that this analysis should be conducted using a “high” sea level rise scenario representing the high end of sea level projected for the project timeline is necessary to address future uncertainty. An optional task (Task 4.2) is included to allow for an additional evaluation of habitat conditions for an additional (i.e., intermediate) sea level rise rate.
8. Following the prediction of the year 50 marsh elevation surface for Year 50 conditions, the coupled UnTRIM-SWAN-SediMorph model will be applied to evaluate the VW staff recommended alternative under future conditions with sea level rise. The same model simulation period used to evaluate Year 0 conditions in Task 2.2 and 2.3 will be used to model future conditions. All boundary conditions will remain the same with the exception of the tidal boundary which will be adjusted to account for sea level rise. The same sea level rise rate for year 50 used in the WARMER model will be used to adjust the tidal boundary for the UnTRIM model. The scope for this task assumes the simulation of only a single VW staff preferred alternative under future conditions.
9. The results of the UnTRIM-SWAN-SediMorph simulation will be used to quantitatively evaluate the long-term level of maintenance in the creek channels and compare this to existing conditions. Similarly, these results will be used to evaluate the long-term deposition of incoming inorganic creek sediment due to the realignment of San Tomas and Calabazas Creeks inside the A8 ponds and Pond A4.

Task 3.1 Deliverables:

1. Draft and Final Technical Memorandum describing:
 - a. projected Pond Sediment Accretion and Tidal Marsh Establishment
 - b. habitat quality of tidal marsh habitat change over time, based on the age of the marsh, expected plant composition, drainage network development, and proximity to ecotone and refugia;
 - c. expected changes in habitat type, acreage, and quality that would occur at Harvey Marsh and the lower reaches of Calabazas and San Tomas Aquino creeks; and Sunnyvale East/West Channels
 - d. evaluation of the long-term creek maintenance from the assumption 8 of Task 3.1.
2. The final memorandum will address comments from Valley Water and PMC and external stakeholders.
3. For the WARMER model, the model source code, input files, and model output for the scenarios simulated will be provided to Valley Water. Model input and output files will be documented in a short memo or appendix

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4. For the UnTRIM-SWAN-SediMophr model, any model inputs that are changed for Year 50 conditions from those provided for Year 0 Conditions under Task 2, Support Project Planning, will be provided. This is expected to include the model bathymetry and the tidal boundary condition along the bayward edge of the focus area for modeling. As described in the Project-Specific Assumptions and Requirements, model outputs inside the focus area for modeling outlined in Figure 1, Project Area, which are used to evaluate the VW staff preferred alternative under future conditions will be provided as a deliverable. Model outputs will be provided in ascii text format to allow for readability and allow for the output to be imported or reformatted for import readily into other software. Model output and output formats will be documented in a short memo or appendix.
5. Participation in two video conference meetings of up to two (2) hours duration at which the modeling/numerical analysis results will be presented to external stakeholder and Valley Water.
6. Consultant will provide the following Task 3.1 Deliverables to PMC:
 - a. Sediment accretion and hydrodynamic modeling of VW Staff Recommended Alternative under future conditions (Task 3.1) by September 2024, including time series plots and estimated tidal datums

3.2 Long Term Flood Risk Assessment and Attenuation Benefit

- 3.2.1 Purpose: Compare the future flooding risk for with and without-Project conditions for Analyze a variety of 100-year flood events for the VW staff-recommended alternative, compared to baseline/existing conditions with consideration of SLR.
- 3.2.2 The Future Project Year for the long-term flood risk assessment will be selected to develop the future marsh condition based on the final year from the pond accretion modeling results in Task 3.1 (i.e., Year 50). The channel and pond bathymetry will be updated to account for the Future Project Year conditions by incorporating the Future Project Year marsh surface developed as part of Task 3.1. Any other projected changes to the bathymetry that will be included in the Future Project Year Conditions will be determined based on the modeling results from Task 2, discussions between the stakeholders, and also the input from Planning and Monitoring consultant team members with expertise in geomorphology. Discussions will also determine the future baseline condition, which may include elements of the South Bay Salt Ponds project, for example. Any changes to the design bathymetry for either the Future Project Year Conditions or the future baseline condition that differs from the Future Project Year marsh surface developed as part of Task 3.1 will be provided by the Planning and Monitoring consultant team.
- 3.2.3 Use hydraulic modeling to assess the flooding risk for both the No Project and With Project (i.e., VW staff recommended alternative) conditions, both when it was first formed (Year 0, with Year 0 sea level rise applied) and at Project Year 0 + the Future Project Year years with sea level rise applied for the Future Project Year. The with-Project (VW staff-recommended alternative) condition will incorporate pond-bottom and creek bathymetry expected for Future Project Year. The Future Project Year without project condition will be determined based on discussions between the Consultant, Valley Water and the PMC. Under this task, one future SLR value will be applied to each of the flow scenarios listed below; VW will provide guidance on what value to use. The simulation of additional SLR

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values for future conditions would also require development of a future conditions marsh elevation using WARMER for that rate of sea level rise, since the rate of marsh accretion is affected by the rate of sea level rise in the projection.

3.2.4 As part of Task 2.4, Perform Additional Hydrodynamic and/or Hydraulic Modeling on VW Staff-Recommended Alternative to Assess Any Increases in Flood Risk Post-Project, the 100-year flood risk analysis included five different flow scenarios under both existing with and without project conditions, for a total of ten Year 0 scenarios: Year 0 for existing conditions (5 flow scenarios), Year 0 with project (5 flow scenarios). Under this task, future with and without project conditions will be simulated for 1 SLR rate and five flow scenarios, for a total of 10 future conditions scenarios for this task: Future Project Year without project (5 flow scenarios), and Future Project Year with project (5 flow scenarios).

3.2.5 Questions to be addressed by this modeling include:

1. For the Year 0 runs:
 - a. Use results from Task 2.4, Perform Additional Hydrodynamic and/or Hydraulic Modeling on VW Staff-Recommended Alternative to Assess Any Increases in Flood Risk Post-Project.
2. For the Future Project Year (hoping by then, marsh will be fully formed):
 - a. Identify potential pathways for new flooding risks to arise (e.g., overtopping of sloughs into ponds that could overtop landward levees and cause urban flooding)
 - b. Identify other threats -e.g., to existing and currently planned FEMA flood protection projects near the project site (i.e., Guadalupe River, San Tomas Aquino Creek, Calabazas Creek, Sunnyvale East and West Channels Flood Protection Projects), as well as to infrastructure listed in Section 4, Uncertainty 7.
 - c. Assess how the established tidal marsh and Project geometry will act to change flood risks, when compared to the future with without project condition (i.e., will the tidal marsh be expected to dampen waves, and how much will that help reduce future flood risks)?
3. Flow Scenarios:
 - a. The same five flow scenarios simulated for Task 2.4 for Year 0 conditions will be simulated for Year 50 conditions:
 - b. NOTE: Additional scenarios may be conducted at the direction of Valley Water as part of Task 4.3 (Supplemental Services).

Task 3.2 Assumptions:

1. The HEC-RAS model will be applied to evaluate flood risk for Task 3.2. HEC-RAS is one of the most widely used FEMA-approved models available for the evaluation of 100-year water levels.
2. The combined 1D/2D HEC-RAS model developed and validated for Task 2.4 will be applied in Task 3.2. The model will be updated for Future Project Year Conditions (e.g., Year 50) conditions by incorporating the Year 50 marsh surface developed as part of Task 3.1. The model geometry will also be updated to include a geometry for the future baseline condition, which may include elements of the South Bay Salt Ponds project, for example.

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3. Any changes to the bathymetry for either the Future Project Year Conditions or the future baseline condition will be provided by the Planning and Monitoring consultant team or Valley Water in an electronic format that sufficient detail that they can be appropriately represented in the hydrodynamic model (i.e., GIS shape files, CAD files, or DEMs).
4. It is assumed that the future flooding risk will be assessed for the same future time (e.g., Year 50), which was used to develop the future marsh condition based on the pond accretion modeling results in Task 3.1.
5. The HEC-RAS model will be used to simulate the same five flow scenarios simulated in Task 2.4, adjusted to account for Sea Level Rise. These five flow scenarios will be simulated for both the Future Project Year Conditions and the future baseline condition (10 simulations total).
6. The HEC-RAS model will not be used to simulate water levels only and will not be used to simulate sediment transport.

Task 3.2 Deliverables:

1. Technical memorandum (draft and final technical memorandum) describing modeling results and mapping showing current and Future Project Year floodplains. The final technical memorandum will address comments from Valley Water, the PMC, and external stakeholders.
2. HEC-RAS is not an open-source model (because the source code is not available); however, the model itself is publicly available for download from HEC. All model input and output files for the HEC-RAS simulations conducted for this Task will be provided to Valley Water. Model input, and output files will be documented in a short memo or appendix. These files will be usable using the current release of the HEC-RAS software.
3. The Consultant will provide the following Task 3.2 Deliverables to PMC:
 - a. Flood risk modeling of VW Staff Recommended Alternative (Task 3.2) under future conditions by September 2024.

Task 4 - Supplemental Services

Valley Water may require, and the Consultant will perform, Supplemental Services on an as-needed basis. Prior to performing any Supplemental Services, Consultant must receive an approved Task Order issued by Valley Water and executed by both Parties. Refer to the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 13. Task Orders, and Appendix Three, Task Order Template.

Subtasks 4.1 through 4.3 provide specific examples of optional tasks scoped and budgeted as part of the contract negotiations. Additional possible Supplemental services that could be included at a later date, but which are not defined in the current scope are listed in Task 4.4 and 4.5.

4.1 Additional Hydrodynamic and Sediment Transport Model Scenarios to Evaluate Additional Pond A4 Feasible Alternatives

The evaluation of the feasible alternatives under Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, assumes the simulation of up to five feasible alternatives plus a baseline scenario. The inclusion of Pond A4 in the set of feasible alternatives to be evaluated under Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, may require additional hydrodynamic and sediment transport simulations to screen and evaluate additional

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feasible alternatives. For example, if each of the five feasible alternatives were evaluated with and without the inclusion of Pond A4, or multiple different Pond A4 alternatives were considered with a single feasible alternative for the A8 Ponds, then more than five feasible alternatives would need to be simulated concurrent with Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models. This task assumes that the UnTRIM-SWAN-SediMorph model will be applied for one or more additional feasible alternatives. The model bathymetry and geometry will be updated to represent the features of the additional Pond A4 feasible alternative. The same model simulation period and boundary conditions used in Task 2.2, Develop and Evaluate Feasible Alternatives & Baseline Models, will be used to evaluate the additional feasible alternative(s).

Task 4.1 Assumptions:

1. The same model simulation period used to evaluate the feasible alternatives for Year 0 conditions in Task 2.2, will be used to model evaluate additional feasible alternatives. All boundary conditions will remain the same as those used in Task 2.2, except as needed to account for changes related to the feasible alternative being modeled.
2. The model bathymetry and geometry will be updated to represent the features of the additional feasible alternative.
3. It is assumed that the PMC or Valley Water will provide the location and geometric details of the additional feasible alternative in an electronic format that sufficient detail that they can be appropriately represented in the hydrodynamic model (i.e., GIS shape files, CAD files, or DEMs).

Task 4.1 Deliverables:

1. Update to the Task 2.2 technical memorandum to document the results and analysis of the additional feasible alternative and if appropriate, additional comparisons of the additional feasible alternative simulated for this task and one or more of the other feasible alternatives simulated under Task 2.2.
2. Based on the requirements outlined in the RFP, for the area inside the region identified as the focus area for modeling outlined in Figure 1; Project Area, the model grid for the additional alternative, model bathymetry/DEM for the additional alternative, and all model input files (bathymetry, flow and sediment flux time series for all inflows, predictions of tidal water levels, salinity, and sediment concentration along the bayward edge of the focus area for modeling will be provided for the area outlined in Figure 1; Project Area. Note that the boundaries for the input files may deviate from the area shown in Figure 1: Project Area to follow the alignment of the existing grid cells on the focus area boundary but are not expected to be substantially different. The model input files and boundary conditions inside region identified as the focus area for modeling outlined in Figure 1: Project Area will be provided in a ascii text format that can be imported or reformatted for import readily into other software.as required by the CDFW Proposition 1 grant funding.
3. Model outputs inside the focus area for modeling outlined in Figure 1: Project Area which are used as project metrics, are used to compare between alternatives, or used for model validation will be provided as a deliverable for each feasible alternative. Model outputs will be provided in ascii text format to allow for readability and allow for the output to be imported or reformatted for import readily into other software. Model output and output formats will be documented in a short memo or appendix.

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4.2 Additional Marsh Accretion Scenario and Future Condition Hydrodynamic Model Simulation to Evaluate Future Habitat with Intermediate SLR Rate

Under Task 3.1 the WARMER model will be applied for a single SLR rate to predict future marsh accretion for Year 50. Under this optional task, the WARMER model will be applied to evaluate long-term accretion within the A8 Ponds and Pond A4 for the VW staff-recommended alternative and assess the resulting habitat under future conditions for an additional rate of SLR (i.e., an intermediate rate of SLR or other SLR curve selected by Valley Water). Following the prediction of the year 50 marsh elevation surface for Year 50 conditions, the coupled UnTRIM-SWAN-SediMorph model will be applied to evaluate the VW staff recommended alternative under future conditions with the additional SLR rate.

Task 4.2 Assumptions:

1. The WARMER model will be applied to evaluate long-term accretion within the A8 Ponds and Pond A4 for VW staff-recommended alternative and assess the resulting habitat under future conditions for an additional SLR rate.
2. The same version of WARMER that was used for Task 3.1 will be used for this task.
3. The same approach to incorporate the effects of both deposition of creek sediment and marsh accretion over the time horizon evaluated which was developed in Task 3.1 will be applied for this task.
4. The time frame for analysis will be 50 years after project construction, with interim outcomes determined at 10-year intervals within the 50-year period.
5. The same approach used to evaluate habitat conditions for the 50-year horizon and each ten-year interval in Task 3.1 will be used to evaluate habitat conditions for the additional WARMER marsh accretion simulation.
6. Following the prediction of the year 50 marsh elevation surface for the additional SLR rate, the coupled UnTRIM-SWAN-SediMorph model will be applied to evaluate the VW staff recommended alternative under future conditions with additional rate of SLR. The same model simulation period and boundary conditions will remain the same as those used for Task 3.1, with the exception of the tidal boundary which will be adjusted to account for the additional SLR rate. The same sea level rise rate for year 50 used in the additional WARMER model simulation will be used to adjust the tidal boundary for the UnTRIM model. The scope for this task assumes the simulation of only a single VW staff preferred alternative under future conditions with the additional SLR rate.

Task 4.2 Deliverables:

1. Update to the Task 3.1 technical Memorandum describing projected Pond Sediment Accretion and Tidal Marsh Establishment. To include additional Year 50 marsh accretion scenario and additional evaluation of future habitat conditions with additional SLR rate.
2. For the WARMER model, the model source code, input files, and model output for the scenarios simulated will be provided to Valley Water.
3. For the UnTRIM-SWAN-SediMorph model, any model inputs that are changed for the additional model simulation conducted for this task will be provided. This is expected to include the model bathymetry and the tidal boundary condition along the bayward edge of the focus area for modeling. Model outputs inside the focus area for modeling outlined in Figure 1; Project Area which are used to evaluate the VW staff preferred alternative under future conditions with the additional rate of SLR will be provided as a deliverable. Model outputs will

SCHEDULE P SCOPE OF SERVICES

be provided in ascii text format to allow for readability and allow for the output to be imported or reformatted for import readily into other software.

4.3 Simulation of Additional Flow Scenario for Flood Risk Analysis

The HEC-RAS 1D/2D model was applied to assess post project flood risk under Year 0 conditions (Task 2.4, Perform Additional Hydrodynamic and/or Hydraulic Modeling on VW Staff-Recommended Alternative to Assess Any Increases In Flood Risk Post-Project) and under Year 50 conditions (Task 3.2, Long Term Flood Risk Assessment and Attenuation Benefit). This optional task includes one additional flow scenario to augment the flood risk analysis conducted for Tasks 2.4 and 3.2, Perform Additional Hydrodynamic and/or Hydraulic Modeling on VW Staff-Recommended Alternative to Assess Any Increases in Flood Risk Post-Project. Additional flow scenarios may be added as an optional task to consider different recurrence interval events (i.e., 50-year event), or other combinations of tidal and flow recurrence events beyond those simulated under Task 2.4 and 3.2 (i.e., 10-year extreme tides + 100-year riverine flows). The cost estimate for these scenarios assumes that the alternative geometry will not change from the scenarios simulated under Task 2.4 and 3.2, however the flow or tidal boundary conditions will change. Cost for this task includes coordination with Valley Water on development of new boundary conditions, simulation of the additional scenario, update to the technical memorandum, and providing model files for the additional scenario.

Task 4.3 Assumptions:

1. The 1-D HEC-RAS model will be applied to simulate one additional flow scenario to support the existing or future flood risk analysis.
2. No changes to alternative geometry will be made for the additional flow scenario.
3. The scenario will include changes to either tidal conditions and/or the inflows.

Task 4.3 Deliverables:

1. Update to the Task 2.4 technical memorandum (for additional flow scenario under Year 0 conditions) or update to the Task 3.2 technical memorandum (for additional flow scenario under Year 50 conditions) to include additional flow scenario.
2. HEC-RAS is not an open-source model (because the source code is not available); however, the model itself is publicly available for download from HEC. All model input and output files for the HEC-RAS simulations conducted for this Task will be provided to Valley Water. These files will be usable using the current release of the HEC-RAS software.

4.4 Review Draft Deliverables Submitted by Planning and Monitoring Consultant (PMC)

Under this task, the Consultant will review the Draft Deliverables submitted to Valley Water. This review may include the following documents:

- 1) Assessment methodology for conceptual and
- 2) Assessment methods for feasible alternatives
- 3) 5% drawings of alternatives
- 4) Conceptual Alts draft report
- 5) Feasible Alts Draft Report

SCHEDULE P SCOPE OF SERVICES

- 6) Planning Study Report
- 7) Monitoring Plan

Task 4.4 Assumptions:

- 1. Consultant will only review the sections of the PMC deliverables that fall within Consultant's area of expertise.
- 2. Review comments will be provided directly into the document using either Microsoft Word or Adobe Acrobat software.
- 3. A total of up to four (4) hours is budgeted for each of the seven (7) PMC deliverables listed above (32 hours total).

Task 4.4 Deliverables:

- 1. Review comments on each PMC draft deliverable will be provided to Valley Water.

4.5 Specific examples of possible Supplemental Services include, but not limited to:

- 4.5.1 Additional modeling/numerical analysis to support conceptual alternative development or analysis of refined alternatives;
- 4.5.2 Data collection in support of model calibration including flow monitoring, suspended sediment sampling, etc.;
- 4.5.3 Ecological modeling to support design that contributes to improved future habitat (e.g., adding refugia or additional ecotone);
- 4.5.4 Additional modeling numerical analysis to support the project design, CEQA/NEPA, or permitting activities.

4.6 Additional Services. The Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Task 1 through 3 as Task 4 Supplemental Services, to include but not be limited to:

- 4.6.1 Participation at additional project and stakeholder meetings including preparation of materials, presentations, and meeting notes;
- 4.6.2 Additional time allotted for meetings;
- 4.6.3 Additional status/progress reports;
- 4.6.4 Additional phone conference calls;
- 4.6.5 Additional and refined modeling and numerical analyses, including the potential for some simple modeling to be conducted during the Conceptual Alternatives phase, if required;
- 4.6.6 Revisions and/or amendments to Task 1 through 3 deliverables;
- 4.6.7 Additional pages or copies of technical memoranda, plans, exhibits, reports, drawings, figures, and tables; and

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4.6.8 Additional public and stakeholder outreach materials.

7. Attachments

The following Schedule P Attachments are incorporated herein by this reference as though set forth in full:

Attachment One - Fees and Payments

Attachment Two - Schedule of Completion

Attachment Three - Consultant's Key Staff and Subconsultants

Attachment Four - Reference Materials

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**SCHEDULE P
ATTACHMENT ONE
FEES AND PAYMENTS**

1. Total Authorized Funding

Total payment for Services performed, to the satisfaction of Valley Water, as described in the Schedule(s) will not exceed a total amount of **\$500,000** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed NTE payment amount without prior written approval in the form of an amendment to this Agreement executed by Valley Water's Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown

The total NTE amount of this Agreement consists of the following breakdown. No services will be performed or fees paid by Valley Water to the Consultant for Supplemental Services without prior written authorization by Valley Water as stated in this Agreement.

COST BREAKDOWN

Task	Description	Not-to-Exceed Fees
1	Project Management	\$75,000
2	Support Project Planning	\$300,000
3	Perform Modeling/Numerical Analysis to Inform Design and Address Uncertainties related to Project Long-term Success	\$120,000
4	Supplemental Services	\$5,000
Total Not-to-Exceed Amount		\$500,000

3. Terms and Conditions

A. Payments for services performed, as defined in this Schedule, which applies to the specific Services, will be based on the following terms:

- 1) Valley Water will pay for Services provided by the Consultant according to the schedule of rates for professional, technical, and administrative personnel as well as materials and supplies as listed below in the Hourly/Unit Rate Schedule.
- 2) The stated hourly rates are effective for the term of this Agreement unless otherwise revised as indicated. After 12 months from the date this Agreement is entered into by parties ("anniversary date"), and each 12 months thereafter, these hourly rates may be negotiated by the Consultant and Valley Water, provided Consultant submits written notice to Valley Water of Consultant's request to revise the hourly rates 90 calendar days prior to the anniversary date of this Agreement. Both parties will use as a benchmark for negotiations the percent change for the previous 12 months of the "Employment Cost Index (ECI), for total compensation for private industry workers, for the San Francisco-Oakland-San Jose, CA CSA Census region and

**SCHEDULE P
ATTACHMENT ONE
FEES AND PAYMENTS**

metropolitan area (not seasonally adjusted)” as published by the U.S. Department of Labor, Bureau of Labor Statistics, or 3%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by Valley Water’s Deputy Operating Officer.

B. Reimbursable Expenses

- 1) All reimbursable expenses not already covered in overhead may include, but are not limited to, mapping, rendering, printouts, leased equipment, mailing and delivery services, printing services, film and processing, plotting, and supplies. These other direct expenses as approved by Valley Water Project Manager (VWPM) will be billed on a monthly basis at actual cost linked to each Agreement Task, provided that the Task total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted. No markup will be applied to reimbursable expenses, either by the Consultant or by its subconsultants, subcontractors, or vendors. Consultant shall provide invoices for all such services regardless of cost.
- 2) Equipment purchased on behalf of Valley Water that costs \$50 or more must receive the prior written approval of Valley Water Project Manager (VWPM). All equipment purchased on behalf of Valley Water and paid for by Valley Water shall become the property of Valley Water and be delivered to Valley Water prior to expiration of this Agreement.
- 3) Travel expenses are reimbursed at actual costs. Travel and overnight accommodations, including per diem, required for performance of this Agreement will be paid at reasonable cost not to exceed the state employee rates as identified on the California Department of Human Resources (CalHR) website under travel reimbursements for state employees, <https://www.calhr.ca.gov/employees/pages/travel-reimbursements.aspx>, provided prior approval has been obtained from Valley Water Project Manager (VWPM). For air travel, Valley Water will pay the cost of a coach class or equivalent ticket. Where air travel is required, Valley Water will pay the total cost of taxi, rideshare, public transportation, or a rental car, which may include insurance, gas, car fee, and taxes and will be paid at the actual costs incurred. Vehicle rental is limited to a compact or economy model, unless prior approval has been obtained from Valley Water Project Manager (VWPM) for a different type of vehicle.
- 4) Expenses incurred by the Consultant, including for Subconsultants, subcontractors and vendors, including lab services, will be reimbursed at actual cost. Consultant shall provide invoices for all such services regardless of cost. No markup will be applied, either by the Consultant or by its subconsultants, subcontractors, or vendors.

- C. For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant must obtain written approval from the Valley Water Project Manager (VWPM) as to the numbers of hours per task prior to that individual working on the Project. [NOT USED]

**SCHEDULE P
ATTACHMENT ONE
FEES AND PAYMENTS**

D. Prevailing Wage Requirements [NOT USED]

- 1) The Scope of Services described in a Task INSERT APPLICABLE TASK NUMBER HERE may be considered by Valley Water to be “Public Works” requiring the payment of prevailing wages. See the Standard Consultant Agreement, Section Four, Fees and Payments, subsection 3. Prevailing Wages.
- 2) In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water’s Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

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**SCHEDULE P
ATTACHMENT ONE
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE

CLASSIFICATION/STAFF	HOURLY/ UNIT RATE
Consultant: Anchor QEA, LLC.	
Principal Engineer 2	\$337.00
Principal Engineer 1	\$295.00
Principal Scientist 1	\$326.00
Principal Scientist 2	\$337.00
Senior Manager 1	\$221.00
Senior Manager 2	\$283.00
Managing Scientist	\$221.00
Managing Engineer	\$215.00
Managing Biologist	\$206.00
Managing Geospatial Scientist	\$175.00
Senior Staff	\$150.00
Senior GIS Analyst	\$143.00
Staff 3	\$137.00
Staff 2	\$134.00
Staff 1	\$118.00
Senior Technical Editor	\$92.00
Technical Editor	\$87.00
Subconsultant(s): None	

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**SCHEDULE P
ATTACHMENT TWO
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all of conditions to formation of an agreement listed in the Agreement at Section Twelve, Miscellaneous Provisions, subsection 2. Formation of Agreement.
2. This Agreement expires three (3) years, after the Effective Date, unless, prior to its expiration, its term is modified by a written amendment hereto, and signed by both Parties. Upon agreement, the parties may extend the Agreement for two (2) additional one (1) year term extensions, if desired by Valley Water.
3. Valley Water and Consultant may agree to modify the schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modification in writing.

PROJECT SCHEDULE

Task	Description	Duration From Notice to Proceed (months)
1	Project Management	Duration of the Agreement
2	Support Project Planning	Month 1 to Month 21
3	Perform Modeling/Numerical Analysis to Inform Design and Address Uncertainties related to Project Long-term Success	Month 15 to Month 25 (End of Project)
4	Supplemental Services	Duration of the Agreement

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**SCHEDULE P
ATTACHMENT THREE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

1. Consultant's key staff assigned to the Project are as follows:

Team Member	Classification	Project Role	Contact Information
Michael MacWilliams	Principal Engineer 2	Modeling Lead	33 New Montgomery St., Suite 1210 San Francisco, CA 94105 Phone: 415-361-5154 mmacwilliams@anchorgea.com
Aaron Bever	Managing Scientist	Sediment Transport Modeling	1201 Third Street., Suite 2600 Seattle, WA 98101 Phone: 206-709-6859 abever@anchorgea.com

2. The following Subconsultants are authorized to perform Services pursuant to this Agreement:

Firm	Project Role	Contact Information
N/A	-	-

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**SCHEDULE P
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref No.	Description
1	Santa Clara Valley Water District Non-Disclosure Agreement (NDA) (FC 1650)
2	Santa Clara Valley Water District (Valley Water) Standards for GIS Products April 2021 version: http://gis.valleywater.org/Download/GIS_PRODUCT_STANDARDS.pdf
3	Calabazas and San Tomas Aquino Creek Realignment Project - Final Feasibility Report: https://fta.valleywater.org/dl/cGtbScbVM4
4	Technical Memorandum – Realignment Phase 1 Modeling Report: https://fta.valleywater.org/dl/AGyam3l8BG Technical Memorandum – Realignment Phase 2 Modeling Report: https://fta.valleywater.org/dl/r4QZKhXrD2
5	South Bay Salt Pond Restoration Project – Pond A8 Phase 1 Action Engineer’s Report: https://fta.valleywater.org/dl/KYMbyolzRS
6	South San Francisco Bay Shoreline Economic Impact Areas 1 to 10 – Hydraulic Analysis Report: https://www.valleywater.org/sites/default/files/E7_Final_Appendix%204_Southshore_Hydraulics_Report_0316_NCI.pdf
7	South San Francisco Bay Sediment Transport Modeling Report: https://fta.valleywater.org/dl/PbjagqZF9p
8	Calabazas-San Tomas Aquino Pond A8 Reconnection: Preliminary scenario simulations Report: https://fta.valleywater.org/dl/emC3lqlji6
9	Morphodynamic Development in the Alviso Slough System Modeling Report: https://fta.valleywater.org/dl/prWi5AknH9
10	Proposition 1 Watershed Restoration Grant Program Calabazas/San Tomas Aquino Creek – Marsh Connection Project Grant Agreement: https://fta.valleywater.org/dl/wDvWA7C4iP

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