STANDARD CONSULTANT AGREEMENT



(For Capital Consultant Contracts) Terms and Conditions Template Rev. C [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), and CAROLLO ENGINEERS,INC. a Delaware corporation (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.
- 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 section 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 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 Total Fixed Not-to-Exceed (NTE) Fees stated in Attachment One to the Schedule(s), 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 Attachment One to the Schedule(s), 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 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 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;
 - Other direct charges and expenses must reflect actual fees versus the Agreement Not-to-Exceed Fees as stated in Attachment One to Schedule(s), 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 Project Schedule in Attachment Two to the Schedule(s), Schedule of Completion, which applies to the specific Scope of Services, and within the Agreement NTE Fees in accordance with Attachment One to the Schedule(s), 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:
 - 1. Electronic copies to be sent via email: <u>APinvoice5750@valleywater.org;</u>
 - 2. Hard Copies to be sent to:

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); and
 - 6) 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 Attachment One to the Schedule(s), Fees and Payments, to the Schedule(s), 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.

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.
- B. Labor Code §1720 includes "Inspection and Land Surveying" in its definition of "Public Works." If Consultant's Services includes such work, Consultant and its Subconsultants must comply with all Labor Codes applicable to prevailing wages.
- 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, the 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 to verify statutory compliance with the prevailing wage requirement, such as certified payroll records, must be made available for audit at no cost to Valley Water, at any time during regular business hours, upon written request by Valley Water.

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, the 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

Unless otherwise specified in Attachment One to the Schedule(s), 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. 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 Attachment Two to the Schedule(s), 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 Attachment Two to the Schedule(s), 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.

- 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.

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 computergenerated 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 delivered to 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.

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

The Santa Clara Valley Water Valley Water is an equal opportunity employer and requires its consultants to have and adhere to a policy of equal opportunity and nondiscrimination. In the performance of the Agreement, the 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 (Sections §503 and 504); the Age Discrimination Act of 1975 (42 U.S.C. sec. 6101 et seq.); the California Fair Employment and Housing Act (Government Code Section 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 assuring nondiscrimination and non-harassment as provided in this Agreement. Consultant must investigate all complaints directed to it by Valley Water. Valley Water will refer complaints in writing and Consultant will advise Valley Water in writing when such investigations are concluded. The scope of such investigations must include all appropriate officers, employees, and agents of the Consultant, as well as all subcontractors, Subconsultants, and material suppliers of the Consultant. In cases where such investigation results in a finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective disciplinary 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;
 - Submission by the Consultant, and acceptance by Valley Water, of all required Non-Disclosure Agreements (NDA) documents as provided in Attachment Four to the Schedule(s), 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.

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 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 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.

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, and 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, Gov. Code §81000 et. seq. and Government Code §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 (Appendix One), 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 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 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 PM, Scope of Services, and the following listed Attachments are incorporated herein by this reference as though set forth in full:

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

Attachment Five to Schedule PM – Valley Water's Risk Methodology and Matrix

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	CAROLLO ENGINEERS, INC.
Valley Water	Consultant
By:	By:
Tony Estremera	Christopher T. Cleveland
Chair, Board of Directors	Senior Vice President
Date:	Date:
ATTEST:	By: Sanjay Reddy Senior Vice President Date:
Michele L. King, CMC Clerk, Board of Directors	Consultants Address: 2795 Mitchell Dr Walnut Creek, CA94598

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STANDARD CONSULTANT AGREEMENT APPENDIX ONE ADDITIONAL LEGAL TERMS

1. Conflict of Interest for Future Services

- A. At the time of this award, Valley Water is not able to determine whether undertaking this agreement will permit or prohibit the consultant that wins this solicitation from entering into agreements for subsequent design projects that are a part of this 30-year WTP Implementation Plan. Eligibility to submit a proposal under Section 1090 will be evaluated on the specific facts as they exist at the time of proposal submittal on the subsequent design project.
- B. 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:
 - i. For any agreement to be awarded for planning, construction management or the construction of any project that is related to the Services provided pursuant to this Agreement. However, if Valley Water retains the selected firm to perform program management services as a supplemental service beyond the initial implementation plan development to help oversee the implementation of the approved projects, the firm will be precluded from proposing on future subsequent design and construction projects during the period where the firm would oversee the implementation of these projects.
 - ii. 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
 - iii. 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 Officer unless delegated to the Unit Manager.
- 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]

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

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.

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STANDARD CONSULTANT AGREEMENT APPENDIX THREE TASK ORDER TEMPLATE

Task Order No	
Title:	
Agreement: Standard Consultant Agreement Clara Valley Water District ("Valley Water") and dated	
Valley Water:	
Consultant:	

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

- 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. Project schedule for completing the Scope of Services.
- 3. Consultant shall be compensated at fixed fees or at the hourly rates established in Attachment One to the Schedule(s), Fees and Payments, of the Agreement. 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].

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
 - 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:		
5	NAME OF CONSULTANT FIRM [PRINT NAME] [PRINT TITLE]	DATE
Signature:		
	SANTA CLARA VALLEY WATER DISTRICT [PRINT NAME] [PRINT TITLE]	DATE

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Water Treatment Plant Implementation Project Standard Consultant Agreement-Capital Ver. 8/2/21

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 checklist 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 Requirement 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 <u>valleywater@ebix.com</u>.

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/CAS No. 5144

IMPORTANT: The agreement or CAS number must be included.

CAS File No. 5144

Attachment 1 Page 31 of 96

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

- 1. Certificate Holder shall be named as Additional Insured;
- 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/CAS No. 5144

IMPORTANT: The agreement or CAS number must be included.

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

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:

\$5,000,000 per claim/ **\$5,000,000** 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. 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.

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:

 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, 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. <u>NOTE:</u> 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. <u>NOTE:</u> This section does not apply to the Workers' Compensation and Professional Liability 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.
- 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 <u>Required</u> <u>Coverages</u> 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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CHECK LIST OF DOCUMENTS NEEDED

		· · · · ·
General Liability:	Α.	Limits (\$2,000,000)
	В.	Additional Insured (Endorsement)
	C.	Waiver of Subrogation (COI, Endorsement or policy language)
	D.	Primacy (COI, Endorsement or policy language)
	E.	Cancellation Endorsement
		1
Auto Liability:	Α.	Limits (\$2,000,000)
	В.	Additional Insured (Endorsement)
	C.	Waiver of Subrogation (COI, Endorsement or policy language)
	D.	Primacy (COI, Endorsement or policy language)

Umbrella:	Α.	Limits (\$)	
	В.	Primacy (Endorsement or policy language)	
Workers Comp:	Α.	Limits (\$1,000,000)	
	В.	Waiver of Subrogation (Endorsement or policy language)	
	C.	Cancellation Endorsement	

Cancellation Endorsement

Ε.

Professional Liability:	Α.	Limits (\$5,000,000)	
	В.	Cancellation Endorsement	

Appendix Four Consultants rev. 4.16.21

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1. Representatives

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

Barton Ching (VWPM) Senior Engineer Treated Water Division Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118-3638

Phone: 408-630-3079 Email: <u>BChing@valleywater.org</u>

Nancy Pan (Valley Water Unit Manager) Capital Engineering Manager Treated Water Division Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118-3638

Phone: 408-630-2028 Email: <u>NPan@valleywater.org</u>

Bhavani Yerrapotu (Division Deputy Operating Officer) Treated Water Division Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118-3638

Phone: 408-630-2735 Email: <u>BYerrapotu@valleywater.org</u>

B. The 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.

Chris Cleveland (Consultant Project Manager or CPM) Senior Vice President 2880 Gateway Oaks Drive, Suite 300 Sacramento, CA 95833

Phone: 916-207-4359 Email: <u>ccleveland@carollo.com</u>

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

Chris Cleveland (Consultant Principal Officer) Senior Vice President 2880 Gateway Oaks Drive, Suite 300 Sacramento, CA 95833

Phone: 916-207-4359 Email: <u>ccleveland@carollo.com</u>

2. About Valley Water

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 1.8 million residents and businesses. Valley Water effectively manages ten dams and surface water reservoirs, three potable water treatments plants, an advanced water purification center, a state-of-the-art water quality laboratory, nearly 400 acres of groundwater recharge ponds and more than 275 miles of streams.

3. Scope of Services

- A. This Schedule PM, Scope of Services describes the professional planning and conceptual design services to be performed by Consultant for Valley Water's Water Treatment Plant Implementation Project (Project).
- B. Consultant shall be responsible for the services authorized to be performed under the scope of services, and shall perform the services comprising each task, except where it is expressly stated that such services will be performed by others.

5. Project Objectives

The Water Treatment Plant (WTP) Implementation Project will develop a comprehensive implementation plan that coordinates regulatory-driven changes with aging infrastructure needs and other operational improvements for WTPs as well as integrates with the recently completed Water Supply Master Plan (WSMP).

The main objectives of the project are as follows:

- A. Define project goals and objectives including but not limited to capacity, water quality, and reliability goals that align with Valley Water's WSMP.
- B. Determine improvements needed for each WTP to meet the defined goals and objectives over a 30-year period through the following evaluations:
 - 1. Identify improvements needed to meet future capacity, water quality, reliability and other goals.
 - 2. Develop a 30-year renewal and replacement (R/R) plan.
- C. Integrate the recommended WTP improvements with other Valley Water infrastructure planning projects improvements.

- D. Synthesize improvements into projects which may provide varying levels of service at different costs, perform alternative analysis, select preferred projects, and prepare planning study report.
- E. Develop an implementation plan, including scope, budget, and coordinated schedule, for the preferred projects (capital, operations and maintenance).
- F. Prepare a report summarizing all work completed and present the recommended 30-year Capital Improvement Program for Valley Water's WTPs.
- G. Prepare a Programmatic Environmental Impact Report (PEIR) for the project.
- H. As a supplemental service, perform program management services beyond the initial implementation plan development to help oversee the implementation of the WTP projects approved by the Valley Water Board.

6. Project Background

Valley Water owns and operates three WTPs that provide potable water supply to Santa Clara County. Rinconada Water Treatment Plant (RWTP) is the sole provider of the west side treated water distribution system. Santa Teresa Water Treatment Plant (STWTP) and Penitencia Water Treatment Plant (PWTP) are both located on the east side of the treated water distribution system and can serve as a back-up supply for each other. Source water for the WTPs comes from various sources including the State Water Project (SWP) water via the South Bay Aqueduct, the Central Valley Project water via the San Luis Reservoir, and local Calero and Anderson reservoirs. Potable water produced at the plants augments local groundwater sources for Santa Clara County, which Valley Water maintains through its managed recharge program. Valley Water also owns an advanced water purification center that treats secondary treated wastewater using advanced treatment technologies to produce ultra-pure recycled water. In addition, Valley Water maintains two ancillary systems that supply backup potable water. The San Francisco Public Utilities Commission (SFPUC) - Valley Water Intertie Pipeline and Pump Station Facility (Intertie Facility) provides emergency potable water supply backup to the east distribution system should STWTP or PWTP be out of service. The Campbell Well Field (CWF) is a groundwater well system owned and operated by the Valley Water, constructed under a joint development agreement with the City of Campbell. The primary purpose of the CWF is to provide drinking water during emergencies, supply shortages or during planned and unplanned RWTP outages.

RWTP was constructed in 1967 and is a conventional water treatment plant that is currently undergoing a Reliability Improvement Project. The reliability improvement project will be constructed in six phases. Phase 2 construction has been completed in 2020 and Phases 3 to 6 are yet to be constructed under a separate construction project. The production capacity of RWTP remains at 80 million gallons per day (mgd) after the completion of Phase 2 and will be 100 mgd upon final completion of Phases 3 to 6. The new treatment facilities constructed as part of Phase 2 include a raw water flow control and metering facility, two ozone contactor structures (flow through only; no ozone application), a flash mix facility, four flocculation and sedimentation basins and a washwater recovery facility. In addition to the new Phase 2 facilities, the RWTP currently has six dual-media filters, two clearwells with a total capacity of 1.67 million gallon (MG), a treated water pump station with four booster pumps that lift treated water to a 15 MG treated water reservoir and a residuals handling facility that includes gravity thickeners and centrifuges for sludge handling and disposal. The Phase 3 to 6 facilities haven't been constructed yet and may include ozone generation building, liquid oxygen (LOX) facility, filters, chlorine contact basin and fluoridation and sodium hypochlorite facilities.

STWTP was constructed in 1989 and is a conventional water treatment plant with a design capacity of 100 mgd. The treatment processes at STWTP include pre-oxidation, clarification, intermediate ozonation for primary disinfection, filtration, fluoridation, free chlorination/chloramination as backup disinfection, and chloramination as secondary disinfection. The plant is equipped with four flocculation basins, four sedimentation basins, two ozone contactors, twelve dual-media filters, one 10 MG clearwell, two washwater clarification basins and sixteen off-site sludge drying beds.

PWTP was constructed in 1974 and is a conventional water treatment plant with a design capacity of 40 mgd. The treatment processes at PWTP include pre-oxidation, clarification, intermediate ozonation for primary disinfection, filtration, fluoridation, free chlorination for backup disinfection, and chloramination as secondary disinfection. The plant is equipped with three flocculation basins, three sedimentation basins, two ozone contactors, six dual-media filters, a 3 MG flow-through clearwell, and a belt-press facility for sludge handling and disposal.

The Silicon Valley Advanced Water Purification Center (SVAWPC) was constructed in 2014 and has an initial design capacity of 8 mgd with future expansion capability to 9 mgd. The treatment processes at the SVAWPC include microfiltration (MF), reverse osmosis (RO), and ultraviolet (UV) disinfection. The plant is equipped with eight MF membrane units, three RO membrane units, and twelve UV disinfection reactors. Water treated at the SVAWPC is blended with tertiary effluent from the San Jose/Santa Clara Regional Wastewater Facility to reduce the total dissolved solids concentrations and improve the overall quality of the recycled water delivered by the South Bay Water Recycling.

Intertie Facility enables SFPUC and Valley Water to share water resources during planned maintenance or an emergency. The Intertie pumps are capable of transferring up to 40 mgd of water in either direction. The Intertie Facility consists of pumps, flow meter, phosphoric acid chemical storage and feed system, generator system for emergency power and water quality monitoring equipment.

CWF consists of three wells with a maximum design capacity of 4.2 mgd of drinking water to the City of Campbell through the Campbell turnout on the West Pipeline. When system demands require that the facility be operated continuously, two wells will be operated concurrently with a combined maximum rate of 3 mgd and the third well will remain as standby. Each well is equipped with a pump and motor as well as a backflow prevention valve, air relief valve, pump-to-waste line, flow meter, sample tap and gate valves. A manifold is provided to combine the flow from the three wells before the turnout. Chemical injection followed by a static mixer is provided before the manifold for chlorination.

The infrastructure needs for the WTPs have been developed over the years through a number of planning documents focused on specific process areas and not through an integrated master implementation plan. There is a need to develop a comprehensive implementation plan that coordinates regulatory-driven changes with aging infrastructure needs and other operational improvements for the WTPs as well as integrates with the recently completed WSMP.

The WTP Implementation Project was adopted as part of Valley Water's Fiscal Year (FY) 2021-25 five-year Capital Improvement Program (CIP). The Project will develop a 30-year Capital Improvement Program with an implementation plan along with a PEIR for Valley Water Board's consideration.

7. 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 Project objectives and 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, the Consultant will perform some of the Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, Valley Water Project Manager (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 Three, Scope of Services.
- 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.
- 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)** Valley Water will provide written comments electronically on all draft versions of Consultant's written deliverable documents.
- 2) Valley Water will schedule project meetings with Valley Water staff and external stakeholders as needed and will provide meeting space for all meetings.

Water Treatment Plant Implementation Project Standard Consultant Agreement-Capital Ver. 8/2/21

- **3)** Valley Water has compiled existing relevant plans, reports and documents and will provide guidance in reviewing past reports.
- **4)** Consultant will confirm format of technical memoranda and report with Valley Water and will follow the same format for all deliverables.

C. WTP Implementation Project Tasks

Summary of Project Tasks:

- Task 1 Project Management, Stakeholder Meetings, and Project Development Workshops
- Task 2 Review Existing Records, Master Plans, and Reports
- Task 3 Develop Goals and Objectives with Board and Stakeholder Input
- Task 4 Review Current Asset Management Program Information
- Task 5 Develop Project Assessment Methodology
- Task 6 Evaluation of Rinconada WTP
- Task 7 Evaluation of Santa Teresa WTP
- Task 8 Evaluation of Penitencia WTP
- Task 9 Integrate Recommendations with Other Master Plans
- Task 10 Project Development, Evaluation, Selection, and Planning Study (10% Design)
- Task 11 Project Implementation Plan (WTP CIP)
- Task 12 WTP Implementation Project Report
- Task 13 Stakeholder Outreach Strategy
- Task 14 Environmental Planning and Permitting (PEIR)
- Task 15 Supplemental Services

The Consultant shall provide all services and deliverables as required by this Section 7 Assumptions and Requirements.

Task 1 - Project Management, Stakeholder Meetings, and Project Workshops

The purpose of this task is for Consultant to manage this Scope of Services such that the work is completed within the fees limitstated in Attachment One: Schedule PM, Fees and Payments, and in accordance with the Project Schedule stated in Attachment Two to Schedule PM, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet Valley Water and Project requirements.

Consultant will maintain effective communications among the Valley Water and Consultant team members, obtain Valley Water staff input on work in progress, and provide a forum for consensus building and decision-making.

1.1 Kickoff Meeting

Consultant will attend a 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.

1.2 Project Work Plan

Consultant will prepare a Project Work Plan in accordance with this Scope of Services. The Project Work Plan shall include Project objectives, a discussion of the Consultant's approach to work, a copy of the final scope of work, 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.

The Project Work Plan shall include a Project Quality Assurance and Quality Control (QA/QC) Plan documenting the Consultant's procedures to ensure the 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 quality assurance procedures.

1.3 **Project Management, Progress Meetings, Invoicing, Reporting and Workshops**

Consultant will conduct ongoing internal project management with Consultant staff as necessary to meet the scope of work requirements.

Key staff and sub-consultants as determined necessary and appropriate by Consultant, subject to VWPM approval, will coordinate and attend periodic progress meetings and workshops with Valley Water staff, as needed, to review and discuss 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. The Consultant will lead the meetings. For internal meetings with Valley Water Engineering or Operations and Maintenance staff Consultant will submit meeting content (e.g., power point slide deck or other content) prior to the meetings or workshops for review by Valley Water. For meetings with external stakeholders, Steering Committee, or Executive Committee Consultant will prepare draft meeting content for review by Valley Water staff in advance of meetings. Consultant will submit monthly invoice with progress report and look ahead schedule in accordance with the Agreement, Section Four, Fees and Payments.

1.4 One-on-One Meetings with Valley Water Project Manager

Consultant Project Manager must meet periodically with VWPM to provide a brief update of the team's work activities recently completed, the look-ahead activities, and the issues and actions that require Valley Water's attention. The meeting schedule will be established by Valley Water, weekly/biweekly either in person, or by phone, at Valley Water's discretion.

1.5 Coordination and Communication with External Agencies

Consultant will assist VWPM with coordination and communication with appropriate regulatory or other agencies, as necessary, to execute this Scope of Services. This task includes support in drafting correspondence related to the Consultant's Project activities as requested by Valley Water.

1.6 Public Outreach

If requested, the Consultant will provide support and assistance to Valley Water's public outreach activities and will relate to coordination, preparation, and participation including: preparing presentation materials, attendance at meetings, preparation of newsletters, graphics, updates to the Project website, developing responses to questions, and performing other tasks as directed by the VWPM.

1.7 **Project Schedule**

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Consultant will prepare a baseline project schedule with milestones and update regularly and achieve completion of the project on schedule. Project schedule shall track progress on all tasks at the subtask level. The schedule will not incorporate labor hours or costs. Costs for work performed at each of the four WTP facilities will be tracked separately by Consultant. The monthly update to the project schedule shall include an indication of the progress for each task, anticipated work during the next month and potential changes to project schedule or scope.

1.8 Decision Log

Consultant will create and maintain a record of all key decisions made during the course of the project. For each decision, the log will include the date(s), key factors discussed, decision made, and impacts, if any, on scope, schedule, and fees. The Decision/Change Log will be updated by the Consultant prior to the progress meetings and will be used for discussion purposes.

1.9 Risk Register

Consultant will use a Risk Register methodology to identify, assess and respond to risks to manage or reduce potential adverse effects on the achievement of the Project goals. The Consultant's Risk Register will identify strategies used to overcome the risks, and the resulting impacts to schedule and scope of work. The Risk Register will be updated monthly, and a summary of action items required to mitigate risks will be included in the monthly report.

1.10 Board Communications

If requested, the Consultant will provide support and assistance to Valley Water's Board communication activities that relate to coordination, preparation, and participation including, preparing presentation materials, updates on project schedule, costs and scope, attendance at meetings, preparation of Draft CEO Bulletins, graphics, developing responses to Board questions, and other tasks as directed by the VWPM.

Task 1 – Assumptions

- 1. Level of effort assume project duration of 36 months, not including Program Management services or Additional Services not included in this scope.
- 2. Level of effort assumes preparation of one draft and one final document for the Project Work Plan.
- 3. Level of effort assumes bi-weekly 1:1 project manager meetings at 4 hours per meeting. Biweekly project update meetings will occur virtually.
- 4. Level of effort assumes one of the bi-weekly meetings will be a monthly project progress meeting at 4 hours per meeting. The monthly progress meeting will include key staff from both VW and Consultant. The meeting will have a prepared agenda and will include review of the project schedule (task 1.7), decision log (task 1.8), risk register (task 1.9), and other coordination items. The monthly meetings will be virtual or in-person depending on the complexity of issues to be discussed.
- 5. Level of effort assumes quarterly briefing meetings with Steering Committee at 12 hours per attendee/meeting for 2 attendees/meeting.
- 6. Level of effort assumes 2 meetings per year for 2022 and 2023 with Executive Committee/Board of Directors at 20 hours per attendee/meeting for 2 attendees/meeting. Level of effort assumes 6 meetings during 2024 with Executive Committee/Board of Directors

to support final completion of the project at 24 hours per attendee/meeting for 2 attendees/meeting.

7. Level of effort assumes multiple meetings with retailers and other stakeholders. Consultant will be required to communicate work effort and solicit input, and to present initial findings and recommendations for various tasks, and includes 800 hours for preparation, response to draft presentation comments attendance, and follow-up.

Task 1 - Deliverables

- 1. Project Work Plan including QA/QC Plan.
- 2. Meeting agendas, minutes, and presentations.
- 3. Monthly progress reports, invoicing documentation and look ahead schedules.
- 4. Project schedule (baseline and monthly updates).
- 5. Project decision log.
- 6. Risk Register identifying the Project risks, assessment of impact(s) on scope of work, cost, and schedule. Identification of risk response strategies. On-going monitoring and control efforts and documentation of risks through Project development.

Task 2 - Review Existing Records, Master Plans, and Reports

The purpose of this task is to review existing Valley Water reports, plans, drawings, specifications and other documents related to the project and develop an understanding of the existing condition and functionality of Valley Water's WTPs. Consultant will prepare a memorandum summarizing major findings of relevant existing information and data as they relate to the development of the Implementation Plan.

Consultant will review existing geotechnical reports and summarize findings and recommendations of the reports. Consultant will also provide recommendations for additional work if existing reports and analyses are found to be inadequate to support this scope of work. If additional geotechnical work is determined to be necessary, the scope and level of effort will be determined separately and will be funded out of Supplemental Services budget.

Valley Water will make available the reports, plans, and other information listed in Attachment 4 at the time of the Notice to Proceed. Valley Water will maintain the updated reference document table. A log of the information requested by the Consultant and provided by the Valley Water shall be maintained by the Consultant.

Task 2 – Assumptions

1. It is understood that not all the reference documents have the same level of relevance or value relative to the scope of work for this project. For example, documents including the 2005 Infrastructure Reliability Project Report, shop drawing information, as-built drawings, specifications, etc. have less relevance than the 2016 Infrastructure Reliability Project Report, Water Supply Master Plan, WTP Operations Plans, maintenance records for existing equipment, 2016 and 2021 Watershed Sanitary Surveys for local and imported water sources, WTPs Sanitary Inspections by Division of Drinking Water (DDW), etc. Accordingly, Consultant will use its discretion to assess the documents of primary importance, and the level of review required to support this scope of services.

- Consultant will review existing geotechnical information for RWTP and STWTP in this task to evaluate the need for, and scope of, additional geotechnical that may be required during implementation of recommended projects. For PWTP, due to seismic issues, a more detailed assessment will be completed in Task 8.7.
- 3. Level of effort assumes up to four meetings to discuss significance/relevance of review findings with Valley Water and assess how to account for findings in ongoing work at 6 hours per attendee per meeting for 4 attendees.

Task 2 – Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. One draft and final memorandum summarizing major findings from review of relevant existing information and data (including geotechnical information review for STWTP and RWTP) as they relate to the development of the Implementation Plan.

Task 3 - Develop Goals and Objectives with Board and Stakeholder Input

This task will establish the project goals and objectives for each WTP including but not limited to capacity, water quality, reliability and other goals and objectives. The level of service objectives and goals shall align with Valley Water's WSMP and Board policies. Consultant will review previous reports, corresponding commitments for service, and related Board policies to establish the basis/benchmarks for goals and objectives to be analyzed in this Scope of Services. In assessing the level of service goals and objectives, Consultant will use a "stepwise" progression of analysis: water delivery capacity, reliability, water quality, and other goals. This progression of analysis will enable Consultant to compare and contrast current conditions with existing and future commitments for service from previously completed planning work and related Board policies. Also, this progression of analysis will allow Consultant to account for condition of existing facilities and systems as related to reliability/operability in assessing ability to meet capacity, water quality and other goals.

3.1 Capacity Goals

The demand projections will be completed as part of the Distribution System Implementation Project (not by Consultant) and will likely not be complete for 9 months or more after Consultant initiates its effort on this WTP Implementation Project. Because the capacity goals and associated capacity analysis is a foundation element of this work and will be completed as one of the first tasks, Consultant will use the most recent existing WSMP and Urban Water Management Plan (UWMP) demand projections to establish future capacity goals. Based on the demand projections, Consultant will establish future plant capacity goals for each WTP. Valley Water will establish a milestone date for the updated demand projections with intent to make the new, updated demand information available to Consultant as soon as possible. Upon receipt of the updated demand information, it is understood that Consultant may need to revisit and/or update work completed based on the existing demand information, and that the level of effort for any revisions to work previously completed will be evaluated at that time and will be considered additional supplemental services.

Valley Water has established its commitments for water delivery, including potable and nonpotable supplies, through a year 2040 planning horizon based on analyses of supply availability and reliability (for normal and drought scenarios) in previously completed planning documents,

including but not limited to the WSMP 2040, the 2016 Infrastructure Reliability Plan (IRP), and the Countywide Reuse Master Plan. Consultant will attend meetings led by Valley Water with retail agencies to determine if the retailers' reliability requirements (as previously established in the 2016 IRP) have changed and will update Valley Water commitments for water delivery as needed to reflect any changes for supply capacity Level of Service through the planning year 2040 and beyond. This Scope of Services is to include a planning horizon through the year 2050. Accordingly, any planning level criteria for water delivery beyond 2040 will be provided to Consultant by Valley Water.

The ability of the WTPs to reliably meet Valley Water's commitments for water delivery is based on permitted capacity, which is typically established with one or more of the treatment and/or ancillary systems out of service. Consultant will compare the permitted treated water delivery capacity from Valley Water's WTPs against the daily and annual supply capacity commitments to establish a baseline reliable water delivery capacity based on permitted capacity (i.e., baseline reliable capacity that does not account for the condition or operability of treatment and ancillary systems). Consultants will determine if level of service objectives can be achieved at the permitted capacities (see additional discussion under Reliability below).

This analysis will be completed through the year 2040 planning horizon based on existing documented commitments, and through the year 2050 planning horizon based on information provided by Valley Water. If it is determined that Valley Water's WTP combined capacity meets the supply commitments, any additional supply requirements for retail customers are assumed to be met by the retail customers (e.g., via groundwater or other supplemental sources). Otherwise, any deficits between water delivery commitments and permitted WTP capacity shall be defined.

3.2 Water Quality Goals

Consultant will review the current and future regulations at the State and Federal levels, the current WTP operating permit requirements, and Valley Water's internal water quality goals, listed in the Water Quality Management Plan (WQMP), which may include target contaminant levels for treated water and triggers for source water and Valley Water's plans in response to taste and odor and cyanotoxins to develop the water quality goals for each WTP. Consultant will benchmark with other agencies and jurisdictions to gather information on best practices for water quality goals.

Valley Water has established its commitments for water quality, including potable and nonpotable supplies. The previously established commitments for water quality assume some supply for Valley Water retail customers will be met by the customers' supply sources (e.g. via groundwater or other supplemental sources). As such, Valley Water is only responsible to meet water quality level of service at the respective turnouts for its retail customers.

Consultant will use the previously established water quality goals including treated water quality goals in the WQMP as one basis to assess Valley Water's ability to meet water quality goals based on current regulatory requirements. Consultant is also responsible to create or complete new or supplemental analyses related to Valley Water's commitments for water quality based on an analyses of potential future regulatory requirements. Consultant will rely on the current state of industry knowledge related to pending or possible future regulatory requirements, with the understanding that predicting regulatory requirements beyond the foreseeable future is Water Treatment Plant Implementation Project CAS File No. 5144

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speculative, and of limited value in identifying longer-term master plan concepts. Accordingly, the analyses of pending or potential future regulatory requirements will extend only through the planning year 2030, which Valley Water accepts to be a reasonable planning horizon as relates to pending or potential regulatory changes.

Consultant will compare the permitted treated water delivery capacity and water quality operational requirements from Valley Water's WTPs against the daily and annual supply capacity commitments to determine if objectives for water quality can be achieved at the permitted capacities. This analysis will be completed through the year 2030 planning horizon based on the premise that regulatory requirements beyond this horizon cannot be reasonably predicted, as noted above. Because the scope of services does not include any analysis of water quality beyond the plant (i.e., water quality modeling in the distribution/transmission system beyond the treatment plant entry point to the distribution/transmission system) or beyond the turnouts to retail customers (i.e., within the retail customer service boundary), water quality objectives at the retail customer turnouts will be determined by extrapolation of treatment plant effluent water quality (e.g., disinfection by-product (DBP) objectives at customer turnouts will be calculated based on detention time between the plant effluent and customer turnouts and/or correlated from water quality sampling at the turnouts).

3.3 Reliability Goals

Consultant will help Valley Water develop reliability goals for each WTP for normal operations, and unplanned outages. WTP reliability goals will define the treated water output from the plant only, and that reliability of delivery to system customers via the treated water distribution system will be assessed via separate analyses not included in this scope of services.

Consultant will benchmark reliability goals with other Bay Area agencies and jurisdictions, to include normal operations and unplanned outages. Reliability goals may be in the form of recommended outage duration, recommended levels of redundancy for critical systems within the WTPs, or another format as recommended by the Consultant.

The baseline permitted capacity sets one benchmark to assess the ability of the WTPs to reliably meet Valley Water's commitments for water, but operating at the permitted capacity is largely dependent on the condition and operability of the WTP treatment and ancillary systems (e.g., the condition and operability of WTP systems may be adequate currently, but may be expected to change as systems age where equipment is more prone to downtime or failure). As such, the reliability of treatment capacity and water delivery can only be analyzed upon the completion of an asset/system condition assessment at the WTP.

3.4 Additional Goals

Based on analysis in subtasks 3.1-3.3, Consultant may identify potential supplemental goals to compliment or enhance capacity, water quality, or reliability goals, including but not limited to water treatment infrastructure goals not identified in the WSMP, additional environmental or regulatory goals, ease of operations and maintenance and efficiency improvement goals, and climate change adaptability and other environmental or social benefits goals.

Task 3 - Assumptions

1. Water Delivery Capacity

a. Consultant is not responsible for creating or completing any new or supplemental

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analyses related to Valley Water's commitments for water delivery.

b. The level of effort for this scope of services assumes that raw water transmission capacity, and distribution system capacity and reliability, as related to Valley Water's commitments for water delivery to retail customers, is to be evaluated as part of a separate analysis by others, and is therefore not part of this work effort.

2. Reliability

- a. None.
- 3. Water Quality
 - a. Consultant is not responsible to assess water quality within the retail customers' service boundaries.
- 4. Additional Goals
 - a. The need for (benefit of) additional goals has not been defined. Consultant is only responsible to define potential additional goals to the extent that delivery capacity, reliability, and water quality goals do not meet Valley Water's mission objectives and related Board policies.
 - b. Additional goals would likely require input from the Board and/or a potential change in policy, and as such would require consideration by Valley Water Board. Policy level decisions are beyond the scope of this work effort. Accordingly, Consultant's level of effort to propose potential new or alternate additional goals is limited to a brainstorming workshop, during which potential goals and the rationale for the goals will be considered and/or recommended for further consideration at a policy level by the Valley Water Board.
- 5. Level of effort assumes 10 meetings with retail agencies to be completed as part of Task 1 scope to confirm supply capacity requirements developed previously in the 2016 IRP at 4 hours per attendee/meeting for 2 attendees/meeting.
- 6. Level of effort assumes one preparatory briefing, one internal workshop, one workshop with Steering Committee, one intermediate briefing, to discuss goals with Valley Water and assess how to account for goals in ongoing work at 16 hours per attendee/meeting, and for 4 attendees/meeting

Task 3 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. One draft and final technical memorandum on capacity, water quality, reliability and additional goals and objectives.

Task 4 - Review of Current Asset Management Program Information

The objective of this task is to assess the operational reliability of WTP assets, with emphasis on risk of operational failure for key assets or asset groups that could impact the ability to meet reliability goals.

Valley Water has a comprehensive Asset Management Program (AMP) that includes a detailed asset registry (via Maximo) and management strategy group (MSG) definitions (via the Asset Management Planning Tool (AMPT)). Valley Water has also previously completed a business risk exposure (BRE) analysis of WTP assets (as measured by Probability of Failure (POF), Consequence of Failure (COF) and redundancy). Given that Valley Water has a well-developed AMP, Consultant's scope of services is generally limited to field assessments of WTP assets in order to cross-check and/or validate previous work completed by Valley Water.

In completing the field condition assessment work, Valley Water shall provide raw asset data from Maximo to Consultant, and will define the scope and level of effort required for the cross-check/validation effort (i.e., the Maximo database includes a variety of assets/asset groupings including small parts that are beyond the scope of the field assessment). Valley Water is aware that some key WTP assets (e.g., ozone contactors) are not included in the Maximo data.

In completing the field condition assessments, Consultant will use Valley Water's Asset Management Program Risk Methodology (AMPRM) and is only responsible for developing new or supplemental inspection criteria or POF scoring methods for asset types or MSGs not currently defined in the AMPRM as directed by Valley Water. POF scoring and inspection criteria for existing asset types will be used for the WTP assets, where applicable to preserve the continuity with work already completed by Valley Water. Consultant may recommend and use additional inspection criteria if deemed important to determining asset condition. Consultant is responsible to document condition, potential failure mechanisms, etc. using inspection criteria provided by Valley Water as referenced in their Risk Assessment Methodology and Matrix (Attachment Six). Consultant will use its electronic asset management tool to capture its findings of the assessment and will provide the findings in Maximo database format.

For structures, HVAC and other facilities/building systems Consultant is responsible to complete standard field assessments based largely on visual inspection (i.e., detailed seismic analyses of structures and building systems is not part of the base scope of work). During field assessments, Consultant is responsible to identify potential areas of concern for structures and other facilities/building systems based on age, condition, or potential for poor seismic performance. Consultant will work with Valley Water to determine what additional assessment techniques or methods that could/should be executed (e.g., American Society of Civil Engineers (ASCE) 41 structural analyses), and if determined necessary, this work could be completed under Supplemental Services.

Valley Water is currently in the process of developing repair and replacement (R&R) strategies based on asset condition in-lieu of asset age. The information to support condition-based R&R strategies is more developed for some MSGs than others (e.g., information on mechanical systems condition is more developed than electrical/I&C, and there is limited information on structures and below ground piping). Consultant will recommend R&R strategies specific to WTPs, with emphasis on categories for which information is lacking, and will include recommendations for type and frequency of routine maintenance checks that will support the condition-based R&R strategies.

Task 4 - Assumptions

- 1. General
 - a. Valley Water has an established asset assessment methodology. As such, developing a methodology and completing COF analysis is not part of Consultant's scope of work. Consultant is responsible to complete a field assessment of assets using Valley Water methodology.
 - b. Prior to conducting the field condition assessment work, Valley Water will provide Consultant an export of the asset registry and lead briefing workshops with Consultant

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to describe the specifics and methodology of the AMP, the Maximo registry, the AMPT, and the AMPRM. Valley Water will work with Consultant to establish which assets are not included and jointly develop a method to include (i.e., add them to the database), or not include assets in Consultant's evaluation (i.e., Valley Water to evaluate at a later date).

- c. Based on work previously completed, Valley Water has identified assets and/or asset groupings that present the highest risk. Consultant's primary objective is to conduct field assessments to cross-check and/or validate these assets. The need for field assessments for assets of lesser risk will be determined by Valley Water (i.e., Valley Water may determine there is limited value of a complete assessment of assets of low risk profile).
- d. Consultant is not responsible for review of new assets (e.g., recent upgrades at the Rinconada WTP), or assets planned for upgrades (e.g., solids handling facilities at the Penitencia WTP). Prior to scheduling field assessments, Consultant will meet with Valley Water staff to confirm the assets or asset groupings for which field work is not required.
- e. Upon completion of the field assessments by Consultant, it is understood that time is of the essence, and that Valley Water shall complete its cross-check/validation of the assessment findings against previously completed work, and shall provide Consultant with its findings consistent with Consultants schedule, in order for Consultant to complete subsequent tasks.
- f. Valley Water will provide the current projection of asset R&R projects from the AMPT. Consultant will make recommendations regarding regrouping/reconfiguration of projects as necessary to reflect more efficient project delivery during future implementation phases.
- 2. Mechanical and Electrical Systems
 - a. Valley Water will gather existing information on mechanical and electrical test methods and results for review and evaluation by Consultant.
 - b. Consultant will use a combination of visual inspection and specialty testing to assess the condition of these systems. Consultant will rely on previous maintenance records and input from WTP operations and maintenance staff to assess the need for specialty testing (i.e., for newer or lower maintenance systems, visual assessment may be sufficient, whereas older or high-maintenance systems may require more than visual inspection). Consultant will provide recommendations for additional testing as appropriate.
- 3. Structures
 - a. Valley Water is aware of some concrete structures that are showing signs of deterioration (i.e., soft/pasty surface concrete). Consultant will complete an assessment of all accessible concrete structures using non-destructive testing (i.e., no core samples), and will coordinate with Valley Water the timing for which structures/basins can be removed from services for access. If core sampling is determined to be a necessary next step (i.e., if significant deterioration of surficial concrete is noted), Consultant will recommend scope of work to complete additional testing, to be completed under Additional Services task/budget.
- 4. Underground Piping
 - a. Valley Water has limited maintenance history or other data to confirm the condition of underground piping. Consultant will use a step-wise progression of analysis in order to better quantify and/or develop data on the piping condition: desktop analysis, non-destructive testing of select piping considered to be at risk based on desktop analysis, and visual inspection of size-appropriate accessible piping. Valley Water will be responsible for exposing buried pipe that is determined to be at risk or performing additional condition assessment on buried pipe that is not easily accessible. Valley

Water may choose to delay these activities until a later date or to include these as projects in the implementation plan.

5. Level of effort assumes 4 workshops and two briefings review of the asset registry and AMP with Valley Water, and follow-up meetings to discuss findings of field assessments with Valley Water and determine how to account for findings in ongoing work at 16 hours per attendee per meeting for 4 attendees.

Task 4 - Deliverables

1. Workshop minutes.

Task 5 – Develop Project Assessment Methodology

The objective of this task is to develop a methodology to assess and screen the alternative WTP projects. The methodology will include screening and rating criteria, cost estimating, and project benefit analysis. Consultant will document the process used to develop the methodologies and summarize the final project assessment methodologies developed during this task in a technical memorandum.

5.1 Screening/Rating Criteria

Consultant will develop criterion to evaluate projects for feasibility and separate rating criterion to score projects objectively by WTP process needs.

5.2 Cost Estimating

Consultant will develop a methodology to estimate total project costs, including non-construction, capital, and lifecycle costs. The methodology will be used for non-capital projects (i.e., operations or maintenance projects) and capital projects.

Non-construction costs shall include planning, design, environmental and permitting, right-ofway, land acquisition, and lifecycle operations and maintenance costs.

Capital construction cost estimates shall include itemized capital construction costs for projects, with details corresponding to the design level and availability of project information. The construction cost estimate will include direct construction costs for materials, labor and equipment, including sales tax, appropriate markups for general contractor's general requirements/general conditions, overhead, and profit. The estimate will also include contingencies for design development and estimating factors in accordance with the estimating guidelines set forth by the Association for the Advancement of Cost Estimating (AACE). The estimate will be priced in current dollars. A separate line item allowance will be added to project the current costs to the expected or assumed mid-point of construction.

Capital cost estimate will include vendor quotes specific to proposed facilities, historical construction estimates and cost data, and professional experience with similar projects. Capital costs will include construction-related materials and equipment costs, tax, contractor overhead and profit, owner's reserve for change orders, construction management, and engineering services for design and construction.

Lifecycle costs will be based on expected operation and maintenance costs to include consumables (such as filter media, membranes, UV lamps), energy/power, chemicals, and labor.

For the development of projects to be considered for implementation, a planning level cost estimate consistent with AACE Class 5 estimate (3%-5% design) with an expected accuracy range of -50% to +100% will be used. AACE Class 4 estimate (10% design) with an expected accuracy range of -30% to +50% will be used to further develop the projects recommended to be implemented in the first 10 years.

5.3 **Project Benefits**

Consultant will develop a methodology to analyze benefits as applicable to goals identified in Task 3. The methodology will quantify benefits and develop a cost-benefit ratio for projects. Some benefits may be measured qualitatively, and some may be measured quantitatively (i.e., cost per acre-foot or similar).

Task 5 - Assumptions

1. Level of effort assumes 4 meetings to discuss screening and rating criteria, cost estimating methodology, and approach to assessment methodology with Valley Water at 16 hours per attendee per meeting for 4 attendees.

Task 5 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. One draft and final technical memorandum on project assessment methodology.

Task 6 - Evaluation of Rinconada WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

6.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

6.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using

current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as Per- and Polyfluoroalkyl Substances (PFAS) or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

6.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability and redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

6.4 Additional Goals Evaluation

Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

6.5 **Projects of Concern Evaluation**

The current on-going infrastructure improvement projects at the plant are listed below:

- <u>Reliability Improvement Project</u> This project will improve plant reliability by adding a new raw water ozonation facility, a new flocculation and sedimentation with plate settler clarification facility and a new dual media filtration system as well as increasing the plant capacity from 80 mgd to 100 mgd.
- <u>Residuals Remediation Project</u> This project will improve the capacity, redundancy and reliability of the existing residuals management system.

Plant staff has identified other improvements needed at the plant such as a new ammonia storage and metering facility, plant water system upgrades, Rinconada Reservoir relining and reroofing improvements, a new warehouse, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as a part of the plant recommendations.

6.6 Asset Renewal and Replacement Evaluation

As noted in Task 4 above, many of the assets at Rinconada are new, and therefore may not require near-term field condition assessment. In addition, due to the recent construction work at Rinconada, the asset registry for this facility is not up to date. Consultant will meet with Valley Water staff to confirm the assets or asset groupings for which field work is not required.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, and points of contact. Valley Water will provide the evaluation checklist and forms to document field Water Treatment Plant Implementation Project CAS File No. 5144

observations and findings. Consultant will provide recommendations to modify the content, as appropriate. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sconer. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work).

Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

Task 6 - Assumptions

- 1. Level of effort assumes that Consultant will need multiple site visits to complete Task 6 scope elements, and includes 180 hours for the field condition assessment site visits.
- 2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
- 3. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 6 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. Plant hydraulic model.
- 3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
- 4. Proposed field assessments, procedures and inspection plan.

- 5. Database of field condition assessment findings of assets for validation by Valley Water Staff. Results and findings of field condition assessment in electronic format, consistent with Valley Water AMP.
- 6. Summary of MSG recommendations.
- 7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.

Task 7 - Evaluation of Santa Teresa WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

7.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

7.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as PFAS or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

7.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability and redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

7.4 Additional Goals Evaluation

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Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

7.5 **Projects of Concern Evaluation**

The current on-going infrastructure improvement projects at the plant are listed below:

- <u>Air Wash Line Replacement Project</u> This project will replace the aboveground air wash pipeline and line the below-ground air wash pipeline.
- Backwash Pump P-9/P-10 Rebuild Project This project will rebuild the backwash pumps.
- <u>Filter Media Replacement Project</u> This project will replace the filter media in all twelve filters and replace all nozzles. Failing coating on all filter basins will be power washed or lightly sandblasted. Concrete crack on Filter 5W will be repaired.
- <u>Electrical Improvement Project</u> This project will improve the electrical equipment, extend the service life of the electrical distribution systems and improve reliability and reduce maintenance at STWTP.

Plant staff has identified other improvements needed at the plant such as ammonia injection system improvements, backup chlorine feed addition at ozone contactors, flowmeter replacements, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as a part of the plant recommendations.

7.6 Asset Renewal and Replacement Evaluation

Consultant will complete field condition assessment of plant assets which may include but are not limited to mechanical and electrical equipment, aboveground and below-ground structures and piping, and facilities (i.e., roof, buildings & grounds, etc.).

Consultant will develop the field condition assessment procedure for each asset type. For assets that are not accessible and require system shutdown (i.e., underground structures, piping, etc.), Consultant will also specify the shutdown duration and impacts to the plant. Assessment of electrical and instrumentation equipment should be based on electrical or instrument testing in addition to visual inspection.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, points of contact and evaluation checklist and forms to document field observations and findings. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sooner. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work).

Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

Task 7 - Assumptions

- 1. Level of effort assumes that Consultant will need multiple site visits to complete Task 7 scope elements and includes 300 hours for the field condition assessment site visits.
- 2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
- 3. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 7—Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. Plant hydraulic model.
- 3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
- 4. Proposed field assessments, procedures and inspection plan
- 5. Database of field condition assessment findings of assets for validation by Valley Water Staff. Results and findings of field condition assessment in electronic format, consistent with Valley Water AMP.
- 6. Summary of MSG recommendations.
- 7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.

Task 8 - Evaluation of Penitencia WTP

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated. Consultant Water Treatment Plant Implementation Project CAS File No. 5144

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will document the process of evaluating the WTP for capacity, water quality, reliability, and additional goals and the evaluation of projects of concern in a technical memorandum.

8.1 Capacity Evaluation

Consultant will develop a calibrated plant hydraulic model (Excel based) as part of the initial assessment of existing infrastructure. Consultant will coordinate with VW staff to obtain the data needed (such as level measurements) for the model calibration process. Using the model, Consultant will verify and determine the existing plant capacity and recommend treatment process and equipment modifications and/or additions required to meet future capacity goals identified in Task 3.

8.2 Water Quality Evaluation

Consultant will assess the ability to meet the regulatory and water quality goals established in Task 3 and recommend treatment process modifications and/or additions to facilitate compliance. The ability of the plant to meet current and future regulatory requirements and the water quality goals will be evaluated using the recent historical data from the plant including but not limited to the review of at least the last 10 years of raw and treated water quality, DDW plant sanitary inspections, any process failures of close calls, and areas of challenge. Special attention to be given to wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson outage and San Luis Low Point. Future regulatory requirements and water quality goals that cannot be accommodated by the existing facilities using current or recommended alternative operational practices shall be identified. Ability of the plant to treat emerging contaminants such as PFAS or microplastics or meet more stringent regulatory requirements for primary or secondary contaminants should be evaluated. Consultant shall assess improvements for total organic carbon removal, and disinfection by-product minimization, and biological filtration performance in terms of manganese removal and rerelease.

8.3 Reliability Evaluation

Consultant will assess each treatment process and equipment's reliability redundancy capability and recommend modifications and/or additions required to meet the reliability goals developed in Task 3.

8.4 Additional Goals Evaluation

Consultant will assess the treatment processes and equipment and recommend modifications and/or additions required to meet the additional goals established in Task 3. This may include identifying operating deficiencies and potential modifications or enhancements to optimize the operation of existing facilities/equipment. Operational enhancement could mean adding new equipment, such as adding controls to automate the system. This may also include recommendations to address future climate change concerns, additional environmental regulations, good-neighbor recommendations, or improvements to facilitate long term maintenance activities.

8.5 **Projects of Concern Evaluation**

The current on-going infrastructure improvement projects at the plant are listed below:

- <u>Flocculation and Sedimentation Basin Rehabilitation Project</u> This project will replace equipment in the flocculation and sedimentation basins.
- <u>Residuals Management Project</u> This project will construct a new sludge dewatering facility to replace the existing belt-press facility including all ancillary equipment and will enhance the quality and treatability of the recycled flow returned to the plant headworks. The project will include separation of filter-to-water flow, improvement of wash water recovery ponds and/or construction of a clarification facility, and automation of desludging process from the sedimentation basins.
- <u>Electrical Improvement Project</u> This project will improve the electrical equipment, extend the service life of the electrical distribution systems and improve reliability and reduce maintenance at PWTP.

Plant staff has identified other improvements needed at the plant such as sulfuric acid addition to the raw water, old plant water pumps replacement, Non-ionic Polymer and Phosphoric Acid storage and metering system upgrades, chemical/sample/plant water pipelines rehabilitation, backwash pump structure roof modification, etc. A list of improvements identified will be provided to the Consultant at the time of the Notice to Proceed. Consultant will work with Valley Water staff to validate the list of improvements identified. Consultant will gather information from staff interviews and site-visits and evaluate if the improvements identified should be included as part of the plant recommendations.

8.6 Asset Renewal and Replacement Evaluation

Consultant will complete field condition assessment of plant assets which may include but are not limited to mechanical and electrical equipment, aboveground and below-ground structures and piping, and facilities (i.e., roof, buildings & grounds, etc.) identified under desktop assessment to further refine and update POF scores.

Consultant will develop the field condition assessment procedure for each asset type. For assets that are not accessible and require system shutdown (i.e., underground structures, piping, etc.), Consultant will also specify the shutdown duration and impacts to the plant. Assessment of electrical and instrumentation equipment should be based on electrical or instrument testing in addition to visual inspection.

Consultant will prepare an inspection plan that includes inspection location, procedure, field work sequencing and schedules, data management protocols, safety procedures, points of contact and evaluation checklist and forms to document field observations and findings. Consultant will schedule a conference call to review the inspection plan and collect Valley Water comments.

Consultant will coordinate with Valley Water to schedule site visits and any specific interviews with plant staff. Valley Water staff will be available during the preliminary reconnaissance and condition assessment field visits and will answer questions and escort Consultant staff to the plant areas.

Consultant will conduct field condition assessments and document all field investigation findings. Field visits shall be conducted with senior level Consultant staff from the site/civil, process/mechanical, structural, electrical and instrumentation departments to assess the condition of specific processes and subcomponents. Consultant will complete the field condition assessments as described in Task 4 and will use Valley Water's AMPRM.

Consultant will provide a database of field condition assessment findings of assessed assets.

Consultant will review Valley Water's renewal and replacement schedule for the plant assets and systems that has been updated using Consultant provided field assessment data and management strategy updates. This schedule will be used as a prioritized list of renewal and replacement recommendations, with higher priority projects scheduled sooner. Consultant shall review scheduled R&R projects and recommend changes to the schedule if needed to group projects by system or area of the plant, or in consideration with other plant improvements such as process or capacity upgrades. (i.e., if a system is being upsized, the R&R work may not be needed, or may need to be grouped with capacity increase work). Consultant will provide a summary of recommended changes to Valley Water's R&R schedule.

8.7 **PWTP Geotechnical Assessment**

The objective of this task is two-fold: to review existing geotechnical reports and determine if additional geotechnical analyses are warranted, and to complete additional geotechnical work as necessary.

Consultant will review existing geotechnical reports and summarize findings and recommendations of the reports. Consultant will also provide recommendations for additional work if existing reports and analyses are found to be inadequate to support this scope of work. In developing recommendations for additional work, Consultant will consider if the work can be deferred (i.e., it may be prudent to complete the geotechnical work (if necessary) during the design phase of a specific recommended project).

Task 8 - Assumptions

- 1. Level of effort assumes that Consultant will need multiple site visits to complete Task 8 scope elements and includes 300 hours for the field condition assessment site visits.
- 2. Valley Water will provide Consultant with expected water quality parameters related to potential impacts from wildfires, cyanotoxins, taste and odor episodes, elevated manganese, drought conditions, and supply limitations related to Anderson Reservoir outage and San Luis Reservoir low point, and emerging contaminants such as PFAS or microplastics.
- 3. If additional geotechnical work is determined to be necessary, the scope and level of effort will be determined separately and will be funded out of Supplemental Services budget.
- 4. Upon completion of the field work by Consultant, Valley Water will take lead responsibility to compare, contrast, and/or validate Consultant's assessment against previously completed work and will re-set prioritization for repair or replacement of critical assets as appropriate.

Task 8 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. Plant hydraulic model.
- 3. One draft and final technical memorandum on capacity, water quality, reliability, additional goals and projects of concern evaluations.
- 4. Proposed field assessments, procedures and inspection plan.
- 5. Database of field condition assessment findings of assets for validation by Valley Water Staff. Results and findings of field condition assessment in electronic format, consistent with Valley

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Water's AMP.

- 6. Summary of MSG recommendations.
- 7. Summary of R&R recommended updates based on groupings and other project considerations. Final consolidation/integration of projects will occur in Task 9.
- 8. One draft and final geotechnical assessment report for PWTP.

Task 9 – Integrate Recommendations with Other Master Plans

The objective of this task is to integrate recommendations from this scope of work with other Valley Water implementation and master plan projects. Consultant will use the latest information available from the other projects.

9.1 Integrate STWTP and PWTP Recommendations

Consultant will evaluate the east side treatment system (STWTP and PWTP) as a whole. For example, if 10 MGD of additional capacity is needed on the east side, assess whether it is more beneficial to increase capacity at STWTP or PWTP or both. Consultant will integrate recommendations for STWTP and PWTP to most efficiently achieve the goals identified in Task 3 for the east side treated water distribution system.

9.2 Integrate SCADA Implementation Project Recommendations

Consultant will review findings from the SCADA implementation project efforts and ensure their recommendations are not competing efforts with the WTP recommendations. Consultant will evaluate recommendations from both projects together to eliminate repetitive recommendations, (i.e., if SCADA implementation project recommends a new facility within the WTPs, then it may be combined with the WTP implementation project).

9.3 Integrate Distribution System Implementation Project Recommendations

Consultant will review findings from the distribution system implementation project efforts and ensure recommendations from this work are not competing with the Distribution System Implementation Plan recommendations, and that planned future capacity needs are aligned within both projects. Consultant will evaluate recommendations from both projects together to eliminate repetitive recommendations and to coordinate facility shutdowns during implementation (i.e., if distribution system implementation project recommends a new facility within the WTPs, then it may be combined with the WTP implementation project).

9.4 Integrate Countywide Water Reuse Master Plan Recommendations

Consultant will review findings from the Countywide Water Reuse Master Plan (CWRMP) efforts and determine how recommendations from that work may impact the WTP recommendations. The WTP implementation project should consider space allocations for CWRMP recommendations that may impact the WTPs.

9.5 Problem Definition Report

Consultant will prepare a problem definition report to summarize and document all the problems, findings and recommendations identified from Tasks 6 - 8 including findings and recommendations from integration within WTPs and other Valley Water implementation and master plan projects. This report summary becomes the basis for project development and alternatives analysis.

Task 9 - Assumptions

- 1. Level of effort assumes that Consultant will need multiple meetings with Valley Water and other consultants to stay abreast with work efforts on the Distribution System and SCADA projects, and to present initial findings and recommendations for the Task 11 work, including the Problem Definition Report, and includes 600 hours for preparation, attendance, and follow-up for 4 attendees/meeting support staff.
- 2. Valley Water will arrange meetings and check-ins with the other project teams throughout the project.

Task 9 - Deliverables

- 1. Meeting agendas, presentations, and minutes.
- 2. One draft and one final Problem Definition Report.

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Task 10 - Project Development, Evaluation, Selection, and Planning Study (10% Design)

The objective of this task is to develop a list of project alternatives and to perform a comprehensive alternative analysis to select a final set of preferred projects. Consultant will use the project assessment methodology developed in Task 5 to evaluate the project alternatives. Final selected projects will be further developed with Planning Study Report and Basis of Design preparation.

10.1 Generate High-Level Projects to Address Needs

Consultant will generate high-level potential projects which address the needs and recommendations identified in Tasks 6 through 8. Consultant and Valley Water will jointly determine if detailed alternatives analysis is required based on the specific project type. Consultant will develop site plans, process diagrams, and AACE Class 5 cost estimates for all projects generated.

10.2 Screen and Score Projects, Select Recommended Projects, and Bundle and Prioritize Projects

Consultant will gather all high-level projects in a single table and screen the projects for feasibility using the project assessment methodology developed in Task 5.1. After the projects are screened for feasibility, the Consultant will perform a comprehensive scoring to propose final suite of options to implement projects. Based on internal and external stakeholder input, a final package of projects will be selected.

10.3 Planning Study

For projects to be implemented in the first 10 years, Consultant will develop the projects to a basis of design level and develop AACE Class 4 cost estimates.

Consultant will prepare a Planning Study Report to document the entire project formulation process. This report will include the project background, objectives, problem definition, conceptual

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and feasible alternatives analyses, the recommended projects, the basis for the selection, and Basis of Design.

Task 10 - Assumptions

- 1. General
 - a. Consultant will complete the Project Development, Evaluation, and Selection Process for Penitencia, Santa Teresa, and Rinconada WTPs (total of 3). Because the Rinconada WTP has been recently upgraded, the level of effort assumes minimal project development and analysis for new capital projects by comparison to Penitencia and Santa Teresa WTPs.
- 2. Basis of Design
 - a. For each project type and each facility, the Planning Study Report will include a Basis of Design Criteria summary table and 10% conceptual level engineering to include, but not be limited to:
 - i. Major project element list
 - ii. Plant hydraulic and process flow diagrams
 - iii. Key design and performance criteria
 - iv. Conceptual site layouts (generic plans and section views)
 - v. Potential equipment vendors (as well as any related procurement issues)
 - vi. Recommendations for levels of automation/control
 - vii. Specific discipline considerations (civil/site, mechanical, electrical, instrumentation and controls, etc.)
 - viii. Major operations and maintenance considerations (access, redundancy needs, etc.).ix. Lifecycle cost estimates
 - b. As part of the SCADA implementation project, new SCADA standards will be developed for the WTPs. Consultant will use the new SCADA standards to develop the basis of design for the projects. Design criteria shall comply with Valley Water, Local, State, and Federal agency requirements.
- 3. Meetings
 - a. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities in this task. A total of 1000 hours is included in the level of effort (400 hours each for Penitencia and Santa Teresa, and 200 hours for Rinconada).

Task 10 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. One draft and one final "high-level" conceptual alternatives report.
- 3. One draft and one final recommended alternatives report.
- 4. One draft and one final Planning Study Report.

Task 11 - Project Implementation Plan (WTP CIP)

The objective of this task is to develop a comprehensive implementation plan for the preferred projects over a 30-year period. Consultant will determine how Valley Water can most efficiently and cost effectively implement these projects. The preferred projects will be assembled into a feasible construction schedule based on dependencies and sequencing for various project types and opportunities to group/consolidate. This schedule will determine the capital requirements for each year of the 30-year planning horizon.

The scope and breadth of the master plan effort will generate significant new data and associated technical analyses, all of which must be organized and archived. Consultant will use industry standard electronic tools and information management system applications to maximize efficiency of project execution. The information management system will also include an electronic CIP that is integrally linked to specific project-related information for each treatment plant via a customized system developed by Consultant and hosted in Valley Water's Microsoft cloud-based environment. The electronic CIP will provide project implementation details for the planning horizon including goals/drivers, estimated costs, schedule, and interdependencies. The electronic CIP and implementation plan will be adaptable by Valley Water staff should planning level assumptions or priorities change over time (i.e., a "living document"). Scheduling and phasing of the preferred projects will align with Valley Water's other implementation and master plan projects.

11.1 Staffing Plan

Consultant will perform a staffing evaluation and provide a recommended staffing plan to compliment the implementation schedule of the preferred projects. Consultant will review staffing plans from other similar utilities to establish benchmarks that may be used for comparison with Valley Water. In assessing the staffing level requirements, Consultant will use a "stepwise" progression of analysis: operational and maintenance guiding objectives, tools, technologies and vendor contract services that could assist with operations, functional groups required for operation, staffing keys to success, and staffing scheduling. This progression of analysis will enable Consultant to compare current conditions with existing and future commitments for service and the associated requisite staffing.

11.2 Technical Baseline Document

Valley Water has identified a need to develop a document ("Technical Baseline Document") to summarize lessons learned, best practices, preferences and minimum standards related to design and construction, with the intent that this information would be used as baseline/benchmark information to establish objectives and expectations at the start of preliminary design for new capital projects. The Technical Baseline Document will include items that are typical for most WTP projects and include general, civil, structural, mechanical, electrical, and instrumentation and control systems disciplines.

Task 11 - Assumptions

- 1. General
 - a. Level of effort assumes that Consultant will need multiple meetings with Valley Water to establish the basis for staffing, and to present initial findings and recommendations for the staffing plan work and includes 600 hours for 4 attendees/meeting.
 - b. The level of effort assumes that multiple meetings/workshops with Valley Water engineering, operations and maintenance staff will be required to develop the technical baseline document to solicit input and feedback. A total of 200 hours for these meetings and workshops is included in the level of effort.
 - c. Consultant is not responsible to develop standard specifications or other related design standards as part of the Technical Baseline document.

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- d. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities for the Project Implementation Plan work in this task. A total of 200 hours is included for these meetings and workshops in the level of effort.
- 2. Project Information Management System
 - a. Consultant will customize the information management system using the Critical Path Method (CPM), so that all project participants have access to customized project information on a single common project interface platform.
- 3. Staffing Plan
 - a. The objective of the staffing plan is to provide analysis and support treatment plant organizational structure and staffing needs to operate and maintain the treatment facilities in the future, and also to support implementation of projects.
 - b. The staffing plan will outline staffing qualifications, recruitment, and training requirements.

Task 11 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. One draft and final Project Implementation Plan.
- 3. One draft and final Staffing Plan.
- 4. One draft and final Technical Baseline Document.

Task 12 - WTP Implementation Project Report

The objective of this task is to prepare a final report that incorporates the conclusions of all work on the project. The report will present a recommended 30-year Capital Improvement Program for Valley Water's WTPs that includes a suite of recommended capital improvement projects and an implementation plan. The report will summarize all recommendations from Tasks 3-11.

Task 12 - Assumptions

1. The level of effort assumes that multiple meetings/workshops with Valley Water will be required to review work in progress, solicit input and feedback, and coordinate all work activities in this task. A total of 200 hours is included in the level of effort.

Task 12 - Deliverables

- 1. Meeting agendas, minutes, and presentations.
- 2. Draft and Final WTP Implementation Project Report.
- 3. Closeout Checklist of all tasks and deliverables completed.

Task 13 - Stakeholder Outreach Strategy

The objective of this task is to develop a stakeholder outreach strategy and provide technical support to the stakeholder outreach effort as well as holding workshops throughout the project to obtain stakeholder input and concurrence.

Consultant will develop a stakeholder outreach plan that identifies internal and external stakeholder groups. Valley Water may form a separate Technical Advisory Group (TAG) consisting of experts in a number of disciplines and regulatory bodies and ask Consultant to work with the TAG group as part of the stakeholder outreach plan. The plan will describe how and when

outreach will be conducted to the various groups. Outreach may include individual meetings, group meetings, email/written or other communication. The plan will identify the goals of each stakeholder meeting or communication.

Consultant will facilitate the meetings and support Valley Water staff on technical, regulatory or other matters. The consultant's primary involvement in the Stakeholder Outreach effort will be to 1) recommend method, timing, and goal of outreach throughout the duration of the project, 2) prepare slides, handouts and/or other materials for the stakeholder meetings and workshops, 3) facilitate and present information at stakeholder meetings and 4) during the outreach process, perform additional technical, regulatory and/or environmental analyses to support the ongoing stakeholder meetings.

Consultant will prepare presentation materials and make presentations to the Valley Water Board and stakeholders if needed. Consultant will summarize the stakeholder outreach process and results in a technical memorandum.

Task 13 – Assumptions

1. Valley Water staff will be responsible for organizing and conducting the stakeholder meetings.

Task 13 - Deliverables

- 1. Draft and final stakeholder outreach plan
- 2. Stakeholder meeting facilitation, materials, displays and handouts, and minutes
- 3. Presentation materials for Valley Water Board meetings
- 4. Draft and final technical memorandum on Stakeholder outreach process and results

Task 14 - Environmental Planning and Permitting (PEIR)

Deliverable Format. Consultant will ensure the technical level of writing will be such that the material is fully understandable by a person without specific training in the field at hand but without compromising its value to the target audience. The target audience includes technical, managerial, and executive personnel, as well as Valley Water's Board of Directors, staff, and the public.

Compliance with National Environmental Policy Act

Compliance with National Environmental Policy Act may be required for some of the projects identified within the Program that have federal nexus.

As early as possible, Consultant, Valley Water staff and the federal agency shall determine whether NEPAcompliance is necessary, based on identified federal sites for projects under the Program or retained alternative(s) or if federal nexus will be established through grants or other funding mechanisms.

As part of Supplemental Services Task 15.7, if NEPA compliance is required, Consultant shall prepare a scope and budget, and contract modification request to prepare an Environmental Assessment (EA) that includes sufficient information that the NEPA lead agency can prepare the Finding of No Significant Impacts (FONSI) or Environmental Impact Statement (EIS), as appropriate. Or, if the federal lead agency prefers, Consultant shall prepare a joint CEQA/NEPA document.

14.1 Preliminary Project Description

14.1.1 Collect Background Information on the Projects

Consultant shall work with Valley Water Project Team to identify additional existing background information which has not been provided, compile a list of all available information and submit the list to Valley Water for review.

14.1.2 Prepare Base Map

Consultant shall prepare a base map for each project area and its environs. The map shall be prepared in a Geographic Information System (GIS) format compatible with Valley Water's GIS system; have an appropriate level of detail to serve as a basis for the analysis associated with task 14.1.2, and subsequent environmental analysis; be constructed in a manner consistent with the protocol for information sharing of Valley Water's GIS department; and be consistent with applicable metadata requirements.

Examples of appropriate level of detail would include inclusion of features located within 300' of the exterior boundary of each project site at a scale of 1" =100'; record boundaries, easements and preliminary title reports; and topography, site improvements and public infrastructure.

14.1.3 Analyze Existing Data and Information, Based on Draft Project Description and Objectives, and Define Key Technical Issues to be Addressed

Consultant shall analyze the existing data and information, based on the draft problem definition and project objectives, in order to define key technical issues to be addressed. Based on this analysis, Consultant shall identify environmental concerns for the projects and preliminary CEQA alternatives that may be carried forward into the PEIR for analysis and document these in a technical memorandum for Valley Water review.

14.1.4 Refine Problem Definition and Project Objectives

In concert with Task 3, Consultant shall meet with Valley Water Project Team to discuss refining the problem definition and project objectives, based on the review and analysis conducted in the previous three items. The problem definition and project objectives will be used to define parameters of environmental analysis and field investigations, as well as the foundation for drafting the detailed project description for each project for use in the Programmatic Environmental Impacts Report (PEIR). The revised preliminary project description is subject to Valley Water review.

Task 14.1 - Assumptions

- 1. Tasks preceding Task 14 will generate CAD or GIS files for proposed improvements that will support Task 14.1.2 deliverables.
- 2. Level of effort is based on not more than one round of review for the Project Description and other deliverables.
- 3. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.

4. Preparation of NEPA documents is not included in this scope of work Water Treatment Plant Implementation Project Standard Consultant Agreement-Capital Ver. 8/2/21

- 5. **CEQA Evaluation.** The California Environmental Quality Act (CEQA) evaluation will be conducted at a program-scale analysis (Program) and the Environmental Impact Report (EIR) document will address the Program elements described in this Agreement. The Consultant will explore with Valley Water whether sufficient detail is available to pursue project-level evaluation for near-term actions contemplated under the Master Plan.
- 6. Quality Management. Valley Water staff is responsible for ensuring that project design meets Valley Water engineering design specifications and Board Ends Policies. Close coordination between the Consultant, Valley Water environmental planners, engineers, and Project Team throughout the course of the project is expected to ensure that critical information for conceptual design, alternatives analysis and environmental analysis is available to the appropriate Project Team members in a timely manner. Valley Water's Environmental Planning Unit for the project is responsible for quality assurance/quality control for work products associated with the environmental planning and review process and environmental management objectives. The first version of each deliverable shall be submitted as a draft to Valley Water for review and comment. The Environmental Planner shall provide consolidated comments to Consultant, and these consolidated comments shall serve as the basis for the final version of the document. The documents shall adhere to Valley Water CEQA guidelines and formats.
- 7. As related to Task 14.1.1, Valley Water shall provide Consultant with:
 - a. Any updates to the projects' goals, objectives and draft preliminary project description that have occurred since the issuance of the RFP.
 - b. Valley Water data and information relevant to the projects; a list of other known available documents relevant to the projects.
 - c. A list of information, including the source(s) and keeper(s) of the information that may be relevant to the projects but is not in Valley Water's possession.

14.1 – Deliverables

- 1. List and Copies of Background Data and Other Compiled Information
- 2. Base Map and metadata
- 3. Memorandum Identifying Environmental Concerns for the Project/Proposed Alternatives
- 4. Draft Project Description and Project Objectives (for CEQA process)

14.2 Initial Environmental Assessment

14.2.1 Gather and Organize Environmental Information Relevant to the Project

Consultant shall work with Valley Water to identify any existing environmental data not previously identified in task 14.1. Consultant shall then gather existing environmental documents, memos, data, plans and policies and other information relevant to each project. Such information may include, but is notlimited to: hazards and hazardous materials assessments of the property(ies) involved; programmatic environmental impact report (PEIR) for similar facilities in the vicinity and/or other projects on the property(ies) involved; biological, or cultural resource studies, Valley Water Watershed Management Initiative (WMI) data and report information specific to the project vicinity; engineering, hydraulic and/orgeotechnical reports for each project area; FEMA reports; other mapping, reports and documentation of special status species in the vicinity of the project site; planning documents by the affected jurisdiction(s), including relevant General Plans, Project

Plans and/or Master Plans; and other relevant materials. Consultant shall submit this list to Valley Water for review.

14.2.2 Summarize Environmental Conditions Based on Existing Data

Consultant shall review existing reports, plans and policies and other information relevant to each project, as identified in task 14.2.1. Consultant shall analyze the environmental conditions, based on existing data, focusing on relevant environmental statutes and regulations that include, but are not limited to, the Migratory Bird Treaty Act, state and federal Endangered Species Acts, cultural and archaeological statutes, noise ordinances and traffic laws.

Consultant shall identify the federal nexus, if any, and the requirement for compliance with NEPA. Should NEPA be required, a scope of work and budget will be prepared as a supplemental task.

Results of this analysis shall be summarized by Consultant in a technical memorandum. The technical memorandum should also identify additional data requirements and environmental issues not previously identified. The technical memorandum shall be submitted to Valley Water for review.

14.2.3 Prepare Field Investigation Plan

Based on the data requirements identified under task 14.2.2, Consultant shall develop a field investigation plan, and submit it to Valley Water for review. These investigations may include, but may not be limited to, biological surveys for sensitive and non-sensitive species, habitat assessments, water quality impact assessment, wetland delineations, investigation of cultural resources and other environmental considerations required under CEQA.

14.2.4 Conduct Site Visit and Surveys, As Appropriate

In accordance with the approved field investigation plan, Consultant shall conduct screening level field assessments on the biological, cultural and other environmental resources, as applicable, within each project vicinity. Consultant shall prepare a technical report, along with supporting field notes, photos and other relevant materials, as appropriate.

14.2.5 Compile Documentation in Support of Draft CEQA Initial Determination Memo

This internal Valley Water document provides the rationale for the use of a particular CEQA document for a project. Consultant, in consultation with the Environmental Planner, shall prepare supporting documentation for draft CEQA Initial Determination Memo, and submit it to Valley Water for review.

Task 14.2 Assumptions

- 1. Level of effort for fieldwork is based on not more than one round of review for deliverables.
- For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
- 3. The scope of work for field investigations assumes definition of facilities sites by Valley Water, and provision of access by Valley Water. The Consultant's cost estimate for Field Investigations is based upon its current understanding of proposed facilities, and represents Water Treatment Plant Implementation Project CAS File No. 5144 Standard Consultant Agreement-Capital

an order of magnitude cost estimate. Additional resources may be necessary to complete field investigations of facilities and/or alternatives generated by Valley Water's design process. Because the level of effort for the initial environmental assessment (Task 14.2) cannot be confirmed at this time, it is assumed to not exceed 180 hours for budgeting purposes.

- 4. Unless deemed necessary to provide an adequate investigation of each potential project effects, the impact analysis will not include intersection volumes or level of service computations.
- 5. Presentation of the regulatory setting at the federal, state and local levels, as well as the evaluation of each project's contribution to cumulative impacts, will be conducted in the PEIR, not in a technical memorandum.
- 6. The scope of work focuses on efforts required for CEQA compliance, and as such, identification of mitigation measures will include a description of elements of a traffic control plan, but not the preparation of conceptual plans for a traffic control plan itself.
- 7. It is assumed that geotechnical and site investigation reports would be completed by Valley Water or other firms and available for reference during completion of the Administrative Draft EIR.
- 8. It is assumed that site access and right of way entry will be available or provided by Valley Water. It is assumed that Consultant will identify any needed access and right of way entry at the early stage of the Program Planning to allow Valley Water to acquire the necessary easements.
- 9. As it relates to Task 14.2.5, Valley Water environmental planner is responsible for finalizing the CEQA Initial Determination Memo, based on the material provided by Consultant.

14.2 – Deliverables

- 1. List of References, and Environmental Data and documents for each project.
- 2. Technical Memorandum identifying additional data required and environmental issues not previously identified.
- 3. Field Investigation Plan.
- 4. Site visit survey notes, aerial photographs, ground level photographs and other appropriate documentation; technical memorandum summarizing field work outcomes.
- 5. Supporting documentation for draft CEQA Initial Determination Memo.

14.3 Environmental Investigations, Surveys and Studies

The Environmental Investigations task includes assessments needed to evaluate environmental impacts of the project as required by CEQA and other applicable laws and regulations. Tasks under task 14.3Environmental Investigations, Surveys and Studies must link closely with 14.2.4, 14.4.A.2 and 14.4.A.5, which require expertise in all areas related to CEQA clearance, especially biological resources.

14.3.1 Conduct Additional Site Visit(s) and Survey(s)

Consultant and Valley Water shall meet to discuss additional site investigations beyond those designated as mandatory in the final Field Investigation Plan, created under task 14.2.3. If the Field Investigation Plan does not include additional field investigations beyond those deemed mandatory, then Consultant shall amend the Field Investigation Plan, and submit it to Valley Water for review. Based on Valley Water's written consent, Consultant shall conduct additional

site visits and surveys, as necessary, and submit to Valley Water for review an addendum to the technical memorandum summarizing field work outcomes.

14.3.2Determine Baseline Environmental Conditions

Consultant shall prepare a report that details the existing site conditions, as determined through completion of tasks 14.2 and 14.3.1 and submit to Valley Water for review. Based on the problem definition and project objectives, this report shall identify design considerations related to biological goals and objectives, habitat requirements, cultural and other environmental resources and potential future conditions. This report shall establish the baseline environmental conditions for the CEQA process and shall be submitted to Valley Water for review. This baseline shall be used to establish the level of CEQA evaluation required for the project.

Task 14.3 Assumptions

- 1. Level of effort for fieldwork is based on not more than one round of review for deliverables.
- 2. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.

14.3 - Deliverables

- 1. Amended Field Investigation Plan; Site Visit Survey Notes, Photographs (Aerial and Ground Level) and Other Appropriate Documentation; Addendum to Technical Memorandum Summarizing Field Work Outcomes
- 2. Baseline Environmental Conditions Technical Report

14.4.A Programmatic Environmental Impact Report

14.4.A.1 Prepare Notice of Preparation

In collaboration with Valley Water, Consultant shall prepare the Notice of Preparation.

14.4.A.2 Assist with Development and Screening of Project Alternatives

Consultant shall work closely with Valley Water's engineering and environmental planning staff to develop criteria for evaluating Conceptual Alternatives. Consultant shall assist Valley Water in developing the Conceptual Alternatives. Consultant shall reference projects from Task 10.2 in the development of Conceptual Alternatives. Consultant shall document the inclusion of environmentally beneficial features (e.g., avoidance, minimization, enhancements) within Project.

Consultant shall prepare a technical memorandum documenting the evaluation process, as well as the conceptual alternatives, and provide this memo to Valley Water for review.

14.4.A.3 Conduct Environmental Scoping

In collaboration with Valley Water Public Information Officer (PIO), Consultant shall schedule and plan the public scoping meeting(s) required by CEQA. At Valley Water's direction, Consultant shall take the lead in conducting the public PEIRscoping meeting, presenting the Program to the public and tracking public comments received formally in writing. Valley Water PIO will provide the transcript of the meeting to Consultant and. Consultantshall provide a summary of the scoping comments received and recommendations for issues to be addressed in the PEIR. Consultant

will revise the draft scoping report in response to Valley Water's comments and submit a final scoping report to Valley Water.

14.4.A.4 Assist with Development and Screening of Project Alternatives

As already developed and evaluated under Task 11, Consultant shall work closely with Valley Water's engineering and environmental planning staff to develop criteria for evaluating a reasonable range of Alternatives, including the "No Project" to be used in the development of the PEIR. Consultant shall assist Valley Water in developing the feasible Alternatives. Consultant shall document the inclusion of environmentally beneficial features (e.g., avoidance, minimization, enhancements) within each Project Alternative. Consultant shall prepare a technical memorandum documenting the evaluation process and provide this memo to Valley Water for review.

14.4.A.5 Refine Project Description

Consultant shall work with Valley Water Project Team to refine the preliminary project description, based on the review and analysis in Tasks 14.2 and 14.3, and the previous three subtasks, to produce a draft detailed project description for use in the CEQA process. The revised project description is subject to ValleyWater review and may require two (2) drafts prior to final.

- 1. The Consultant will update the project description developed based on information provided in Task 14.2 and 14.3 using additional project information provided by Valley Water. The project description will define the Project purpose and need.
- 2. The Consultant will collaborate with Valley Water to develop a Project Description for the PEIR that explains the key elements of the projects to an adequate level of detail to serve as the common project description for all CEQA resource evaluations.
- 3. The Consultant will identify to Valley Water the level of engineering design and associated data needed to complete the Project Description.
- 4. The Project Description will describe in text and map(s) the project areas considered for evaluation in the EIR.
- 5. The Project Description will list Valley Water's objectives for the proposed Project in conformance with CEQA Guideline §15124, and all laws and regulations relevant to services performed for this task, describe the plans for operation and maintenance of the improved facilities commensurate with the level of detail provided by Valley Water.
- 6. The Project description will include all the standard information required by CEQA guidelines, such as
 - i. a site location map
 - ii. description of the proposed Project and its goals
 - iii. Project construction methods
 - iv. long-term management
- 7. The project description will also include a list of responsible and/or trustee agencies that have jurisdiction over the projects under CEQA, including local, state, and federal regulatory agencies.
- 8. The project description will provide an overview of the project alternatives and provide detail on each project element.

- 9. Summary tables will be included to illustrate the elements that comprise each project alternative.
- 10. A draft Project Description will be submitted to Valley Water for review and comment. Valley Water will provide a consolidated set of comments.
- 11. Based on comments and guidance from Valley Water, the Consultant will prepare a revised Project Description. Comments provided by Valley Water on the revised Project Description will be incorporated into the version of the Project Description that will be used in the Administrative Draft PEIR (ADPEIR).

14.4.A.6 Prepare ADPEIR, Including Mitigation Monitoring and Reporting Program

Consultant shall work closely with Valley Water Project Team to develop and document the screening criteria, evaluate the retained alternatives, and identify the preferred alternative(s). Results of this evaluation shall form the basis of the alternatives analysis in the ADPEIR that Consultantshall prepare, working closely with Valley Water's Project Team.

As part of the ADPEIR, Consultant shall prepare a Mitigation Monitoring and ReportingProgram for the Program. Required format is a matrix showing impacts, mitigation measures, timing, status and document references. A permit matrix shall also be prepared for all identified specific projects to be implemented at a later time to facilitate activities under Task 15.3.

The first PEIR delivered to Valley Water shall be an Administrative Draft document. Valley Water shall review the Administrative Draft and provide consolidated comments to Consultant for use in preparing the Draft PEIR. In addition, each document prepared for compliance with CEQA requirements shall be prepared in such a way that the document fully satisfies CEQA requirements.

14.4.A.7 Prepare Draft PEIR, including Mitigation Monitoring and Reporting Program

Based on Valley Water comments compiled by the Environmental Planner and provided to Consultant, Consultant shall revise the ADPEIR. The resulting document shall be the Draft PEIR, including the Mitigation Monitoring and Reporting Program. Valley Water shall review a screen check copy of the Draft PEIR to ensure that Valley Water comments have been incorporated before presentation to the Board of Directors.

Consultant will receive and compile all records to create an indexed, subject-matter organized, and chronically assembled administrative record that will include all relevant documents. Files will be organized into a spreadsheet index, which will be reviewed by Valley Water. A Program email will be set up such that the Consultant's Administrative Record Team can maintain the record for email correspondence and other electronic documents in real time. All email headers will be removed from these records so that the email transport to the record address is not included in the index. The Administrative Record index and materials will be provided on DVD.

Task 14.4.A Assumptions

- 1. Consultant assumes that project Description will address one preferred project; alternatives to the project will be evaluated at a lesser level of detail consistent with CEQA Guidelines Section 15126.6.
- 2. For each project the EIR will evaluate up to 3 alternatives, including the No Project Alternative.

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- 3. Consultant assumes that visual simulations will not be required to support the aesthetics evaluations in the Program EIR.
- 4. Scope of work assumes preparation and attendance at one public meeting and is limited to the preparation and presentation of a PowerPoint presentation during the meeting.
- 5. Scope of work assumes the NOP mailing list of addresses along proposed facilities will be generated by Valley Water's PIO and/or the Public Outreach Consultant.
- 6. Valley Water will be responsible for identifying, securing and coordinating the scoping meeting locations, as well as facilitating the meeting.
- 7. Notice of Preparation and Draft Environmental Impact Report will be distributed in electronic format. Consultant will format public documents suitable for posting on Valley Water website.
- 8. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
- 9. As part of the project description, Valley Water and/or the design team will quantify the area of ground disturbance, quantity of cut and fill, and quantity of earth materials transported to and from the Program Area. Valley Water will assist in the description of key elements of the Program at an adequate level of detail to depict the project to the general public and resource agencies.
- 10. Scope of work assumes that comments on the camera-ready Draft EIR will be primarily related to document layout, format, and editing, and that no substantive revisions of technical analysis will be required; assume electronic copies of administrative draft documents.

Task 14.4.A – Deliverables

- 1. Notice of Preparation
- 2. Draft and final Technical Memorandum on the Screening Process for Conceptual Alternatives, including detailed documentation of conceptual alternatives
- 3. Draft and Final Project Description for CEQA document
- 4. ADPEIR, Including Mitigation and Monitoring Plan
- 5. Public Draft PEIR including Mitigation Monitoring and Reporting Program

14.4.B Programmatic Environmental Impact Report – Public Noticing and Participation Requirements

14.4.B.1 Prepare Notice of Completion

In coordination with Valley Water Environmental Planner, Consultant shall prepare the Notice of Completion for the PEIR. Consultant will assist the environmental planner with the preparation of the IDM.

Consultant shall provide support for the release of the Draft PEIR. Support may include preparation of the support documentation for the preparation of the IDM.

14.4.B.2 Prepare Information for Valley Water Website and Filing with the State Clearinghouse

Consultant shall provide the Draft PEIR and other materials, as appropriate, to fulfill public noticerequirements for posting on Valley Water website and with the State Clearinghouse.

14.4.B.3 Respond to Public Comments

In collaboration with Valley Water Project Team, Consultant shall prepare responses to public comments on the Draft PEIR for review by Valley Water Project Team to ensure responses are consistent with Valley Water policy.

14.4.B.4 Prepare Final PEIR

Based on the public comments and the Response to Comments Report (task 14.4.B.4), Consultant shall prepare the Administrative Final PEIR, incorporating the public comments and responses. The Administrative Final PEIR shall include the Mitigation Monitoring and Reporting Program. Monitoring protocols shall include mitigation elements, a detailed description of equipment and supplies, sampling design (with rationale), data to be collected, sample sizes (as appropriate), timing and frequency of data collection, data analysis, related success criteria, adaptive management activities, and estimated cost.

Consultant shall provide the Administrative Final PEIR to Valley Water for review. Based on Valley Water comments on the Administrative Final the Consultant shall prepare the Final PEIR. Consultant shall provide a screen check copy of the Final PEIR for Valley Water to review to ensure that Valley Water comments have been incorporated.

14.4.B.5 Prepare Findings and Statement of Overriding Considerations

If required, and in coordination with Valley Water, Consultant shall prepare the CEQA Findings and Statement of Overriding Considerations, as directed.

Consultant shall submit the Draft Findings and Statement of Overriding Considerations to Valley Water for comment and prepare the final version of these documents based on Valley Water comments resulting from that review.

14.4.B.6 Prepare Notice of Determination (NOD)

Consultant shall prepare the Notice of Determination, in coordination with Valley Water Environmental Planner.

14.4.B.7 Assist with Public Hearing/Certification of Final PEIR

Consultant shall provide support for Valley Water staff for the public meeting or hearing where Valley Water Board of Directors considers the PEIR for approval. This support may include preparation of materials, answering technical questions at the meeting/hearing, and/or presenting the environmental component of the project. Consultant shall record public comments during this meeting and provide these to Valley Water.

Task 14.4B - Assumptions

- 1. Consultant will assist in preparation of one presentation and supporting materials for a public hearing.
- 2. Final Environmental Impact Report will be distributed in electronic format. Consultant will format public documents suitable for posting on Valley Water website.
- For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Treatment Plant Implementation Project
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Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.

- 4. It is assumed that Valley Water will provide comments received on a weekly basis so that Consultant can review comments as early as possible and begin to develop a strategy for responding to comments.
- 5. Based on the level of public interest in this project, it is assumed that up to 25 comment letters and up to 150 individual comments could be received.
- 6. Scope of work assumes creation of an administrative record of individual documents, such that an approximately 500 labor hours would be required to organize, respond to comments, and complete all task 14.4B tasks.
- 7. Scope of work assumes participation in up to 1 public meetings.
- 8. Scope of work is limited to the preparation and presentation of a PowerPoint overview of the project, impacts, and conclusions of the EIR for the board meeting for certification of the PEIR.
- 9. Meeting summaries will generally characterize comments received; specific recordation of comments will be provided by Valley Water. Scope of work assumes that comments on the camera ready Final EIR will be primarily related to document layout, format, and editing, and that no substantive revisions of technical analysis will be required.
- 10. Valley Water will be responsible for all other project approval materials, including staff report and resolutions.
- 11. Valley Water will be responsible for facilitating legal review of all certification materials.
- 12. Valley Water will pay all filing fees, including CDFW NOD Filing Fee
- 13. For Task 14.4.B.1, The VW CEO will sign the NOC and issue the draft EIR for public review and The VW Environmental Planner will assure the posting of the NOC with the Santa Clara County.
- 14. For Task 14.4.B.3 Valley Water will collect and collate written public comments on the Draft PEIR and provide these collated comments to Consultant.

Task 14.4.B - Deliverables

- 1. Draft and Final Noticing for Valley Water Website and State Clearinghouse Filing
- 2. Notice of Completion
- 3. Public Hearing Displays, Handouts, Meeting Notes, presentations
- 4. Draft and Final Response to Public Comments Report
- 5. Administrative Final PEIR and MMRP, Response to Comments (Task 14.4.B.3), and technical appendices (for example, maps, GIS files, presentation materials, technical data)
- 6. Final PEIR and MMRP
- 7. Findings and Statement of Overriding Considerations, if required.
- 8. Notice of Determination
- 9. Public Hearing Displays, Presentation, Handouts, Meeting Notes
- 10. Administrative Record

Task 15 - Supplemental Services

Valley Water may require, and the Consultant will perform, Supplemental Services on an asneeded basis. Prior to performing such Supplemental Services, Consultant must obtain written authorization in the form of a Task Order approved by Valley Water's Treated Water Division DOO and executed by both Parties. The form of this Task Order will be as per the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, Subsection 13, Task Orders; and, Appendix Three, of the Standard Consultant Agreement, Task Order Template.

Task 15.1 Evaluation of SVAWPC

The objective of this task is to conduct process by process evaluation relative to goals established in Task 3. All plant processes and systems, including structures, HVAC and other facilities/building systems not directly related to plant processes shall be evaluated.

If determined to be required, the scope of work for the evaluation of SVAWPC will generally follow the same scope as completed for Penitencia, Rinconada, and Santa Teresa, modified as necessary to reflect potential reduced level of effort due to the age/condition of the facility.

Task 15.2 Evaluation of Ancillary Systems

The objective of this task is to evaluate ancillary systems including the Campbell Well Field (CWF) and Intertie Facility and assess future process and equipment needs for these facilities. Valley Water will coordinate with SFPUC and City of Campbell to enable Consultant to complete work in this task.

If determined to be required, the scope of work for the evaluation of the ancillary systems will generally follow a similar scope as completed for the SVAWPC, modified as necessary to reflect potential reduced level of effort due to limited scope of the ancillary systems.

15.3 Regulatory Permitting Assistance

This task is intended to produce the permit applications, environmental documents and other support material needed for project implementation. Valley Water Environmental Planner shall take the lead in negotiations with regulatory agency staff. Consultant shall provide support as noted below.

As noted on page one of this scope of work, the WTP Implementation Project will develop a comprehensive implementation plan. Thus, it is unknown at this time, following completion of the programmatic EIR, which projects under the Plan will be moved into the regulatory permitting phase at the completion of CEQA, and the specific regulatory permits that would apply to those projects. The following describes the typical process that would be undertaken for a project-specific regulatory permitting process. However, the specific work approach, and scope, would need to be refined prior to initiation of permitting activities.

15.3.1 Identify Required Permits

Upon completion of CEQA, Consultant will coordinate with the Valley Water Environmental Planner and Team to identify early implementation projects. Consultant will use the matrix of required regulatory permits for the project(s) to be implemented (Task 14.4.A.6) and an overview of work approach for each permit required.

15.3.2 Assist with Initial Regulatory Agency Consultations

Under the direction of Valley Water Environmental Planner, Consultant shall assist in planning and attending initial consultation(s) with regulatory agency personnel. Consultant shall be responsible for keeping detailed notes of meeting(s).

15.3.3 Prepare Draft Permit Applications

In consultation with Valley Water Environmental Planner, Consultant shall identify the necessary permits for the proposed project and prepare the necessary permit applications for the project. The application shall be provided to Valley Water for review.

15.3.4 Prepare Biological Assessment

If required, in consultation with Valley Water Environmental Planner and Biologist, Consultant shall prepare the Biological Assessment, as appropriate, for special status species that are present in the project area and could be impacted by the project. The Biological Assessment shall be reviewed by Valley Water.

15.3.5 Compile/Identify Possible Permit Terms and Conditions

In consultation with Valley Water Environmental Planner and based upon the Mitigation and Monitoring Plan, Consultant shall prepare a matrix of possible permit terms and conditions likely to result from permitting the project. Consultant shall prepare a technical memorandum on possible permit terms and conditions, including the matrix mentioned above, and submit it to Valley Water for review.

15.3.6 Prepare Final Permit Application

Based on the comments received from Valley Water, Consultant shall prepare the permit applications for the project.

15.3.7 Provide Support to Valley Water Team During Permit Negotiations

Consultant shall provide support to Valley Water Project Team during permit negotiations. This support may take the form of strategizing with Project Team members, preparing handouts and/or displays, attending meetings to answer questions and/or give short presentations. At Valley Water discretion, Consultant may be responsible for preparing meeting notes to document meeting discussions and outcomes.

Task 15.3 - Assumptions

- 1. Level of effort for regulatory permitting is based on not more than one round of review for deliverables.
- 2. For each review cycle the Valley Water Project Team will consolidate comments from Valley Water staff and provide a single consolidated set of comments to Consultant. The Valley Water Project Team will address unresolved and conflicting comments from multiple reviewers or provide guidance to Consultant on how to address them.
- 3. The specific permits required for each project, and work approach for each permit process will be determined prior to undertaking Tasks 15.3.3 through 15.3.7.

Task 15.3 - Deliverables

The following potential deliverables are as follows:

- 1. Initial Consultation Meeting Notes
- 2. Draft Permit Applications
- 3. Draft and final Biological Assessment

- 4. Technical Memorandum on Possible Permit Terms and Conditions
- 5. Final Permit Applications and other permit documentations as required and requested by appropriate agency
- 6. (Optional) Ongoing Meeting Notes (Consultant shall submit, in one package, all technical info that went into the biological assessment and permit applications. This may include, but not be limited to, GIS files, vegetation or wildlife survey results, cultural, and resource data.)

15.4 Program Management Services

Consultant may provide program management services beyond the initial implementation plan development, to help oversee the implementation of the WTP projects approved by the Valley Water Board and included in the Capital Improvement Program. Consultant will coordinate with multiple project management teams on the work approach for the program. If this option is exercised, the specific scope of services would be negotiated and executed by Valley Water and the Consultant as a task order at the completion of the implementation plan.

Program Management Work Plan

Consultant will prepare a program management work plan in accordance with the program's scope and shall include the Consultant's approach to effectively manage and administer the program including processes, procedures, techniques and methods to monitor the schedule and budget of the multiple implementation projects, communication protocols, document control and other administrative procedures.

Program Quality Assurance and Quality Control Plan

Consultant will prepare a program QA/QC plan of the procedures to monitor the performance and provision of the services and deliverables to meet Valley Water requirements, accepted industry and professional practices, and standard of care.

Program Risk Management Plan

Consultant will create and maintain a program risk management plan that will include the identification of known risks, potential impacts and probability, risk response strategies, and mitigation measures which will minimize or resolve impacts to the program.

Cost and Schedule Monitoring

Consultant will monitor and track the actual progress and completed activities against the planned activities on the baseline cost and schedule for the program including the various implementation projects. Consultant will prepare an Actual Progress and Completed Activities against Planned Activities Report on a monthly basis.

Consultant will monitor and track the budget and schedule of the implementation projects and report any early warning indicators to the Valley Water PM, while ensuring these are addressed in a timely fashion. Consultant will prepare a Budget and Schedule Report with Early Warning indicators on a monthly basis.

Progress Reports

Consultant will obtain progress reports from the various implementation projects and prepare a monthly progress report that will be a high-level summary of the month's activities with an overall analysis of the various projects' progress including issues and concerns and a look-ahead

schedule for the following month's activities. Consultant will develop a program-level status progress report template for Valley Water approval.

Management of Meetings

Consultant will organize and conduct the following meetings at a frequency mutually agreed upon or as directed by Valley Water. Consultant will prepare agendas and minutes for these meetings.

- Monthly progress meetings with the Consultant and Valley Water PM to review the monthly invoice and progress report.
- Progress meetings with various implementation project management teams, Valley Water staff and other participants as necessary to discuss the progress and planned work, project issues, potential changes, the review of recent activities and agenda items, exchange of new information, planning and coordination of upcoming design/construction and related activities, as well as any other areas for discussion.
- Special technical meetings to resolve issues with various implementation project management teams, designers, contractors, utilities, regulators, local agencies having jurisdiction, Valley Water's plant operations and maintenance staff, and any other participants.
- One-on-one meetings with Valley Water to provide a brief update of the program activities completed, the look-ahead activities, and the issues and actions that require Valley Water's attention, in a weekly/bi-weekly meeting/conference call with Valley Water PM.

Coordination and Communication

Consultant will assist Valley Water with the coordination and communication with external agencies and stakeholders, projects and programs by others, and program participants, including Valley Water's management and operations and maintenance staff, implementation project managers, designers and contractors, including support in drafting correspondence related to the program management activities and other related issues.

Consultant will serve as the primary point of communication for coordination between the implementation project management teams, other program management teams and other parties; receive program correspondence and prepare draft responses; and transmit Valley Water-approved responses. Consultant will maintain program-level correspondence logs, decision logs and action items logs.

Consultant will establish, implement, manage and maintain a Master Calendar of all significant events and meetings for the program's projects, and a Master Project Directory listing all program participants, their role on the program, address, phone numbers(s), email, and other pertinent information, which shall be accessible by all team members.

Consultant will provide program specific input to Valley Water's Capital Improvement Program and long-term financial forecast on an annual basis.

If requested, Consultant will prepare board agenda packages and make presentations to the Valley Water Board.

Task 15.4 - Deliverables

The following potential deliverables are as follows:

1. Program management work plan

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- 2. Program QA/QC plan
- 3. Program risk management plan
- 4. Monthly actual progress and completed activities against planned activities reports
- 5. Monthly budget and schedule reports with early warning indicators
- 6. Monthly progress reports
- 7. Meeting agenda and minutes
- 8. Master calendar and master project directory
- 9. Board agenda packages and presentation materials

15.5 Supplemental Geotechnical Field Work

The objective of this task is to provide supplemental geotechnical support that may be required to better assess cost for upgrades. Work completed under this task would be defined from review of existing geotechnical information under Task 2 (Santa Teresa and Rinconada) and Task 8 (Penitencia).

Because geotechnical information already exists, the scope and level of effort for supplemental field work and the associated technical analyses and findings is expected to be relatively minimal.

15.6 Blue Plan-it® Development and Training

The objective of this task is to build from the results developed in Task 3, and use the Blue-Plan it predictive data analytic tool to evaluate current and future treatment scenarios, and to assess the impacts of changing a variety of inputs and resulting potential operational constraints for the treatment facilities. The effort will be completed in a stepwise fashion by first building the base unit process models for each treatment facility (including the east pipeline connection between Penitencia and Santa Teresa), calibrating the models based on existing operations, and completing analysis of potential future scenarios and/or future treatment additions/modifications. The primary focus of the analyses is to identify potential operational stresses including deteriorating finished water quality, increased operational costs, potential for treatment upsets, etc. that may manifest from source water quality changes. The model will be configured with potential future treatment processes to enable Consultant to test possible process enhancements to address water quality changes and potential regulatory changes, and will identify costs for potential recommended improvements. The model will also be configured with distribution trihalomethane (THM) data for the east pipeline to enable Consultant to test possible process enhancements to address THM potential resulting from water quality changes and potential regulatory changes.

As part of this task, training on the use and application of the Blue Plan-it® tool may also be provided.

15.7 Additional Services

Consultant may provide additional quantities of previously identified services as requested by Valley Water. Consultant may provide additional services for any quantity of tasks and deliverables beyond those stated in Tasks 1 through 14, to include but not be limited to:

1. Additional meetings and workshops;

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- 2. Additional time allotted for meetings;
- 3. Additional status/progress reports;
- 4. Additional phone conference calls;
- 5. Additional support to Valley Water in preparing Valley Water deliverables;
- 6. Additional pages or copies of technical memoranda, plans, reports, drawings, and specifications;
- 7. Additional public outreach visual materials;
- 8. Additional field condition assessment work;
- 9. Additional geotechnical assessments, studies and field work;
- 10. Additional studies required;
- 11. Additional work associated with integrating recommendations from the other implementation and master plan project efforts into the WTP recommendations; and
- 12. Additional work associated with environmental planning and permitting, such as NEPA

9. Attachments

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

Attachment One to Schedule PM - Fees and Payments Attachment Two to Schedule PM - Schedule of Completion Attachment Three to Schedule PM - Consultant's Key Staff and Subconsultants Attachment Four to Schedule PM - Reference Materials Attachment Five to Schedule PM – Valley Water's Risk Methodology and Matrix

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 **\$6,461,429** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed this 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 NTE total compensation of this Agreement consists of the following task fee 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.

Task	Description		Not-to-Exceed Fees	
1	Project Management, Stakeholder Meetings, and			
I	Project Development Workshops	\$	1,054,802	
2	Review Existing Records, Master Plans, and Reports	\$	93,878	
3	Develop Goals and Objectives with Board and			
5	Stakeholder Input	\$	189,034	
4	Review Current Asset Management Program			
4	Information	\$	108,127	
5	Develop Project Assessment Methodology	\$	119,071	
6	Evaluation of Rinconada WTP	\$	226,104	
7	Evaluation of Santa Teresa WTP	\$	311,706	
8	Evaluation of Penitencia WTP	\$	343,564	
9	9 Integrate Recommendations with Other Master Plans		204,905	
10	Project Development, Evaluation, Selection, and			
10	Planning Study (10% Design)	\$	1,331,787	
11	Project Implementation Plan (WTP CIP)	\$	562,654	
12	WTP Implementation Project Report	\$	140,261	
13	Stakeholder Outreach Strategy	\$	107,209	
14	Environmental Planning and Permitting (PEIR)	\$	718,327	
15	Supplemental Services	\$	950,000	
	Total Not-to-Exceed Fees		\$6,461,429	

COST BREAKDOWN

3. Terms and Conditions

- A. Payments for Services performed, as described 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 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 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. 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 U.S. General Services Agency Per Diem Rates for Sunnyvale/Palo Alto/San Jose, California area, provided prior approval has been obtained from Valley Water Project Manager. 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 for a different type of vehicle.

C. A markup of 5% will apply to the Consultant to manage Subconsultants, subcontractors and vendors, including lab services.

D. Prevailing Wage Requirements

- The Scope of Services described in some of the tasks such as Task 8.7 PWTP GEOTECHNICAL ASSESSMENT 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.
- 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 <u>http://www.dir.ca.gov</u>.

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HOURLY/UNIT RATE TABLE

CLASSIFICATION	HOURLY/ UNIT RATE				
Consultant: Carollo Engineers, Inc.					
Project Manager	\$309.00				
Sr. Professional	\$309.00				
Lead Project Professional	\$301.79				
Lead Project Professional – Electrical Engineer	\$301.79				
Lead Project Professional - Advisor/QC	\$301.79				
Project Professional	\$281.19				
Project Professional – Structural Engineer	\$281.19				
Project Professional – Mechanical Engineer	\$281.19				
Professional	\$244.00				
Assistant Professional	\$193.64				
Assistant Professional – Electrical Engineer	\$193.64				
Assistant Professional – Structural Engineer	\$193.64				
Assistant Professional – Mechanical Engineer	\$193.64				
Senior Technician	\$203.94				
Technician	\$146.26				
Document Processing/Clerical	\$128.75				
Subconsultant(s):					
Cal Engineering & Geology					
Principal	\$280.75				
Sr. Professional	\$215.05				
Project Professional II	\$171.29				
Project Professional I	\$139.88				
Project Professional	\$121.63				
Staff Professional	\$96.29				
Sr. GIS/CADD Specialist	\$96.29				

CLASSIFICATION	HOURLY/ UNIT RATE	
Subconsultant(s), Continued:		
ESA		
CEQA Lead	\$262.95	
CEQA Deputy Lead	\$160.04	
CEQA Advisory Support	\$246.38	
Aesthetics	\$166.79	
Geology/Hydrology	\$151.54	
Alternatives Analysis	\$190.94	
Architectural History	\$211.29	
Archaeology	\$175.57	
Air Quality/GHG/Energy/Noise	\$183.59	
Traffic/Transportation	\$195.16	
Jr. Biological Resources	\$110.40	
Katz and Associates		
Executive Vice President	\$263.77	
Vice President	\$217.58	
Director	\$170.93	
Account Executive I	\$93.22	
Graphic Design	\$108.09	
Liquisti		
Principal/Advisor/QC	\$321.10	
V&A		
Principal-In-Charge	\$288.68	
Sr. Project Manager	\$235.52	
Sr. Project Engineer	\$207.08	
Project Engineer	\$143.01	
Associate Engineer	\$148.05	
Assistant Engineer	\$121.14	
Project Admin/Clerical	\$111.97	

SCHEDULE PM ATTACHMENT TWO SCHEDULE OF COMPLETION

- 1. This Agreement commences on the Effective Date, subject to accomplishment of all 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, with the option of two-one (1) year term extensions, after the Effective Date, unless, prior to its expiration, its term is modified by a written amendment hereto, and signed by both Parties.
- 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.

Task	Description	Duration From Notice to Proceed (months)
1	Project Management, Stakeholder Meetings, and Project Development Workshops	Duration of Agreement
2	Review Existing Records, Master Plans, and Reports	2 months
3	Develop Goals and Objectives with Board and Stakeholder Input	5.5 months
4	Review Current Asset Management Program Information	5.5 months
5	Develop Project Assessment Methodology	6 months
6	Evaluation of Rinconada WTP	17.5 months
7	Evaluation of Santa Teresa WTP	18.5 months
8	Evaluation of Penitencia WTP	18.5 months
9	Integrate Recommendations with Other Master Plans	26 months
10	Project Development, Evaluation, Selection, and Planning Study (10% Design)	28 months
11	Project Implementation Plan (WTP CIP)	32 months
12	WTP Implementation Project Report	36 months
13	Stakeholder Outreach Strategy	36 months
14	Environmental Planning and Permitting (PEIR)	36 months
15	Supplemental Services	Duration of Agreement

PROJECT SCHEDULE

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SCHEDULE PM 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 (Address, Phone and Email)
Chris Cleveland	Senior Professional	Project Manager	2880 Gateway Oaks Dr Suite 300 Sacramento, CA 95833 916-565-4888 ccleveland@carollo.com
Dan Baker	Lead Project Professional	IMS	5355 Mira Sorrento Place, Suite 270 San Diego, California 92121 858-505-1020 dbaker@carollo.com
Sanjay Reddy	Senior Professional	Basis of Planning	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 sreddy@carollo.com
Thomas Gillogly	Senior Professional	Process & Ops Support	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 tgillogly@carollo.com
Felicia James	Professional	Facilities Condition & Asset Mgmt	2880 Gateway Oaks Dr Suite 300 Sacramento, CA 95833 916-565-4888 fjames@carollo.com
Scott Weddle	Project Professional	Project Development	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 sweddle@carollo.com
Marianne Springer	Project Professional	Project Development	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 mspringer@carollo.com
Ken Wilkins	Lead Project Professional	Advisor/QC	2795 Mitchell Drive Walnut Creek, California 94598-1601 (925) 932-1710 kwilkins@carollo.com

SCHEDULE PM ATTACHMENT THREE CONSULTANT'S KEY STAFF AND SUBCONSULTANTS

2. The following Subconsultants are authorized to perform Services on the Project:

Firm	Project Role	Contact Information (Address, Phone and Email)
Cal Engineering & Geology	Geologic Field Condition Assessment	Dan Peluso 6455 Almaden Expressway Suite #100 San Jose, CA 925-433-5018 <u>dpeluso@caleng.com</u>
V&A	Infrastructure Assessment	Deborah Kaye 1000 Broadway, Suite 320 Oakland, CA 619-436-5789 dkaye@vaengineering.com
ESA	Environmental Impact Support	Alisa Moore 787 The Alameda, Suite 250 San Jose, CA 415-962-8440 <u>AMoore@esassoc.com</u>
Katz & Associates	Outreach	Karen P. Snyder 1460 Mission Street San Francisco, CA 615-604-2568 ksnyder@katzandassociates. com
Liquisti LLC	Policy & Operational Goals	Phillippe Daniel 6100 Harwood Ave Oakland, CA 925-260-3239 phillippe@liquisti.com

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SCHEDULE PM ATTACHMENT FOUR REFERENCE MATERIALS

Ref No.	Description
1	Valley Water Non-Disclosure Agreement and Personal Non-Disclosure Agreement
2	Valley Water Board Policies
3	Water Supply Master Plan (WSMP) and Monitoring and Assessment Program (MAP) Annual Report and Demands Update
4	Protection and Augmentation of Water Supplies (PAWS) Report
5	Urban Water Management Plan and Water Shortage Contingency Plan
6	Countywide Water Reuse Master Plan
7	South Bay Water Recycling Strategic and Master Plan
8	South County Recycled Water Master Plan
9	Groundwater Management Plan
10	Climate Change Action Plan
11	FY22-26 Capital Improvement Program (CIP)
12	FY22-26 Water Utility Enterprise Operations and Maintenance Plan
13	Asset Management Plans
14	Maximo Asset Registry (excel download)
15	Asset Management Planning Tool Database: Asset Rehab, Replacement and Cost Forecasting (excel download)
16	Maintenance Records for Equipment
17	2005 Infrastructure Reliability Project Report
18	2016 Infrastructure Reliability Project Report and Retailer Level of Service Meeting Notes
19	American Water Infrastructure Act (AWIA) Assessment Tech Memo
20	Treatment Plant Project Drawings, Specifications and Reports
21	Treatment Plant Geotechnical Reports
L	

SCHEDULE PM ATTACHMENT FOUR REFERENCE MATERIALS

Ref No.	Description
22	Operations Plans
23	Water Quality Management Plan
24	Water Quality Goals
25	Water Quality Parameters
26	Water Quality Reports
27	Taste and Odor Action Plan
28	Cyanotoxin Response Plan
29	Local Reservoir Sanitary Surveys
30	State Water Sanitary Surveys
31	San Luis Low Point Analysis Memo
32	Water Quality Data (as requested)
33	Operations Data (as requested)
34	Risk Management and Hazardous Materials Business Plans
35	Current Treatment Plant Projects and Other Identified Needs List

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SCHEDULE PM ATTACHMENT FIVE VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX

Risk Methodology

Overview

The Valley Water measures risk as Business Risk Exposure (BRE). BRE is calculated as follows:

BRE = (Probability of Failure) x (Consequence of Failure) x (Redundancy)

Each of these components is discussed below in more detail.

Probability of Failure (PoF)

PoF is equal to an asset's condition score. The condition score indicates how close the asset is to failure. Scores range from 1 to 5, as shown below:

- 1 Excellent (Normal Maintenance Required)
- 2 Minor Defects Only
- 3 Maintenance Required
- 4 Major Renewal Required
- 5 Unserviceable or Failed

Valley Water performs field condition assessments and assigns an overall condition score, which becomes the asset's PoF. An example of asset condition assessment criteria for a mixer is shown in Table 1. The assessor evaluates the asset for each inspection criteria and assigns the appropriate rating. The assessor then assigns an overall condition score, typically equal to the worst scoring criteria. For example, if 'shaft alignment' is 'failure imminent', but all other criteria are 'excellent', the asset would receive an overall score of 5, because it requires immediate maintenance. The overall condition/PoF score is loaded into the asset databases in Maximo and AMPT and is monitored for changes over time.

Inspection	Rating				
Criteria 1		2	3	4	5
Corrosion	Negligible	Minor	Moderate	Major	Excessive
Support	Excellent		Moderate		Inadequate, Failure Imminent
Functional	Excellent Mixing at all flows	Mixing adequate under all flow conditions	Mixing adequate under most flow conditions	Mixing inadequate 50% of time	Inadequate Mixing
Shaft Alignment Excellent		Minor Wear but no Misalignment	Moderate Wear or Misalignment	Major Wear	Failure Imminent
Belt/Chain	Excellent	Minor Wear	Moderate Wear	Major Wear	Failure Imminent

Table 1: Example Condition Assessment Criteria

SCHEDULE PM ATTACHMENT FIVE VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX

Consequence of Failure (CoF)

Consequence of failure measures impacts of asset failure. The Valley Water evaluates the social, environmental, and financial effects of asset failure to determine CoF. To calculate CoF, subject matter experts assign a score for six categories using a standardized matrix, shown in Table 2 on the following page. The total CoF score is the sum of the scores for each of the six categories. The minimum CoF score is zero, which would occur if an asset scored zero in each of the six categories. The maximum CoF score is 30, which would occur if an asset scored five in each of the six categories. CoF scores do not vary much over time, unless external conditions change, such as an area becoming more populated.

Redundancy

Redundancy accounts for back-up assets or extra capacity within a system. The asset management program is working to develop standards for measuring redundancy and incorporating it into the BRE score.

Total BRE Score

To recap, the Valley Water measures risk associated with an asset with a Business Risk Exposure (BRE) score.

BRE = (Probability of Failure) x (Consequence of Failure) x (Redundancy)

Probability of Failure equals the asset's condition score, which ranges from one to five. Consequence of Failure is determined using the matrix in Table 4, and ranges from zero to thirty. Total BRE scores, therefore, can range from 0 to 150.

The total BRE score is used to determine when an asset requires action or a changed maintenance strategy. Valley Water generally follows the BRE score thresholds below. These thresholds identify when an adjustment in an asset's management strategy is needed. The thresholds may be adjusted over time as risk scores are refined. The thresholds were developed by comparing BRE scores to actual maintenance practices. The critical risk BRE score threshold was set at the point where the Valley Water has typically initiated an asset replacement or rehabilitation project. The moderate risk threshold was set at the point where the Valley Water has typically initiated more frequent condition monitoring of an asset.

BRE Score	Risk Category	Action		
61 – 150	Critical	Develop and implement a risk mitigation strategy such as		
01 - 150	Citical	accelerated asset replacement or rehabilitation		
51 – 60 Moderate Implement more frequent condition monitoring		Implement more frequent condition monitoring		
0 – 50	Low	Continue routine maintenance program as planned		

In addition, the total BRE score is useful in determining relative risk among assets. Rehabilitation work on an asset with a higher BRE score should be prioritized over work on an asset with a lower BRE score.

SCHEDULE PM ATTACHMENT FIVE VALLEY WATER'S RISK ASSESSMENT METHODOLOGY AND MATRIX

CONSEQUENCE OF FAILURE MATRIX

	Parameter	0	1	2	3	4	5
	Service Delivery	No reduction in service	Reduction of service to a localized area and alternatives exist	 a) Reduction of service to a localized area and no alternatives exist b) Reduction of service to entire region and alternatives exist 	 a) Interruption of service to localized area and alternatives exist b) Reduction of service to entire region and no alternatives exist 	 a) Interruption of service to localized area and no alternatives exist b) Interruption of service to entire region and alternatives exist 	Interruption of service to entire region and no alternatives exist
Social	Community Impacts	No injury or impact to public well-being; no damage to community property; and no reduction in essential community service (i.e., traffic, hospitals)	 a) First-aid injury b) Impacts public wellbeing for one week or less c) Minor repairable damage to 25 or fewer structures d) Reduction of service to a localized area and alternatives exist 	 a) Recordable injury b) Impacts public wellbeing for one week to one month c) Minor repairable damage to more than 25 structures d) Reduction of service to a localized area and no alternatives exist e) Reduction of service to entire region and alternatives exist 	 a) Short-term disability b) Impacts public wellbeing for more than one month c) Repairable damage to one or more structures d) Interruption of service to localized area and alternatives exist e) Reduction of service to entire region and no alternatives exist 	 a) Permanent disability b) Complete loss of 10 or fewer structures c) Interruption of service to localized area and no alternatives exist d) Interruption of service to entire region and alternatives exist 	 a) Death b) Complete loss of more than 10 structures c) Interruption of service to entire region and no alternatives exist
	Workplace Safety	No injury or impact to well-being	a) First-aid injury b) Impacts wellbeing for one week or less	a) Recordable injury b) Impacts wellbeing for one week to one month	a) Short-term disability b) Impacts wellbeing for more than one month	Permanent disability	Death
Environmental	Environmental Impacts	No damage	Damage to localized area and recovery in less than 1 year	 a) Damage to localized area and recovery in 1-2 years b) Damage to widespread area and recovery in less than 1 year 	 a) Damage to localized area and recovery in 3-5 years b) Damage to widespread area and recovery in 1-2 years 	Damage to widespread area and recovery in 3-5 years	Permanent localized or widespread damage
U	Financial Impacts	No loss	Loss of less than \$25,000	Loss of \$25,000 - \$250,000	Loss of \$250,000 to \$2.5 Million	Loss of \$2.5 to \$25 Million	Loss of more than \$25 Million
Economic	Impact to Reputation	No damage	Public complaints to Valley Water staff	Incidental media coverage and attention of Board members	Incidental media coverage and fewer than 20 public complaints to Board members	Widespread media coverage and 20 or more public complaints to Board members	Widespread media coverage, 20 or more public complaints to Board members, plus potential for criminal charges

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