

**AMENDMENT NO. 5 TO AGREEMENT A3626A
BETWEEN THE SANTA CLARA VALLEY WATER DISTRICT
AND CDM SMITH, INC.**

This Amendment No. 5 (Amendment), effective as of the date it is fully executed by the Parties, amends the terms and conditions of the Standard Consultant Agreement No. A3626A (Agreement) dated January 22, 2013, as amended by Amendment No.1 dated December 23, 2014, Amendment No. 2 dated May 26, 2015, Amendment No. 3 dated October 13, 2015, and Amendment No. 4 dated August 22, 2017, between SANTA CLARA VALLEY WATER DISTRICT ("District" or "Valley Water") and CDM SMITH, INC. (Consultant), collectively, the Parties.

RECITALS

WHEREAS, Consultant prepared the design documents and as Engineer-of-Record, performed engineering support services during construction of the District's Rinconada Water Treatment Plant (RWTP) Reliability Improvement Project (Project); and

WHEREAS, the Agreement currently expires on September 30, 2021; and

WHEREAS, the Parties desire to amend the Agreement to provide for release of retention currently withheld by District; and

WHEREAS, the Parties desire to amend the Agreement to extend its term to provide sufficient time for the Consultant to perform engineering design services during construction of the Rinconada Water Treatment Plant (RWTP) Interim Site Restoration Project; to provide engineering design services for the RWTP Reliability Improvement Project Phases 3 - 6; increase the Total Agreement Not-to-Exceed amount to provide for additional compensation related to the additional services; modify the Project Schedule for Consultant's performance in consideration of the added scope and extended term; and incorporate administrative changes.

WHEREAS, the original Standard Consultant Agreement, as amended, includes Tasks 1 through 18 and remains a part of this Agreement pursuant to this Amendment No. 5. This Amendment No. 5 adds the scope of services for new Tasks 19 through 29 and includes the District's current "Standard Consultant Agreement (For Capital Consultant Contracts) Terms and Conditions Template, Rev. A [5/11/20-6/30/21]" and current "Schedule D, Scope of Services," both of which apply to these new Tasks.

NOW, THEREFORE, in consideration of the mutual promises and agreements stated herein and notwithstanding any provision to the contrary stated in the Agreement, Amendment No. 1, Amendment No. 2, Amendment No. 3, or Amendment No. 4, District and Consultant hereby agree to amend the Agreement as follows:

1. Amendment No. 3 to Revised Standard Consultant Agreement, Section IV. Fees and Payment, paragraph 6, is amended to read as follows:

"The District will release all currently withheld retention for services performed for Tasks 1 through 18 within thirty days of commencement of this Amendment No. 5."

2. This Amendment No. 5 adds the scope of services for new Tasks 19 through 29 and includes the District's current "Standard Consultant Agreement (For Capital Consultant Contracts) Terms and Conditions Template, Rev. A [5/11/20-6/30/21]" and current "Schedule D, Scope of Services," both of which apply to these new Tasks, are attached hereto and incorporated herein by this reference.

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3. All other terms and conditions of Agreement A3626A, Amendment No.1, Amendment No. 2, Amendment No. 3, and Amendment No. 4, not amended as stated herein, remain in full force and effect.

IN WITNESS WHEREOF, THE PARTIES HAVE SET FORTH BELOW THEIR CONSENT TO THE TERMS AND CONDITIONS OF THIS AMENDMENT NO. 5 TO AGREEMENT NO. A3626A THROUGH THE SIGNATURES OF THEIR DULY AUTHORIZED REPRESENTATIVES.

SANTA CLARA VALLEY WATER DISTRICT
District

By: _____
Tony Estremera
Chair, Board of Directors

Date: _____

ATTEST:

Michele L. King, CMC
Clerk, Board of Directors

Date: _____

CDM SMITH, INC.
Consultant

By: _____
Hala Titus
Senior Vice President

Date: 08/25/2021

Firm Address:
2300 Clayton Rd, Suite 950
Concord, CA 92520

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STANDARD CONSULTANT AGREEMENT

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

This Amendment No. 5 (Amendment), effective as of the date it is fully executed by the Parties, pertains to Tasks 19 through 29.

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

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

SECTION ONE

SCOPE OF SERVICES

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

SECTION TWO

DUTIES OF CONSULTANT

1. Performance

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

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

3. Licensing

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

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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.

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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.

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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. Notwithstanding any provision herein to the contrary, the applicable standard of care for Consultant's Services shall be the care and skill ordinarily used by members of the subject professions practicing under similar circumstances at the same time and in the same locality. 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 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

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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.

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- 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;
 - 4) 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

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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: APinvoice5750@valleywater.org;
2. Hard Copies to be sent to:

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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.

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- 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

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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.

3. 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.

4. 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

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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.

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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.

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Consultant may retain a copy for its records. Consultant does not convey, assign, or transfer the intellectual property rights it has so as to limit its ability or right to develop, design, or provide services on other projects of or for its other clients.

2. Reuse of Instruments of Service

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

3. Copies of Data

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

4. Computer-Generated Material

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

5. Work for Hire

Any and all original correspondence, memoranda, reports, designs, plans, specifications, data compilations, computer programs, or drawings 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 non-discrimination. 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

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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.

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2. Formation of Agreement

- A. No agreement between the Parties is formed until all applicable actions have been completed to the satisfaction of Valley Water. Valley Water Project Manager will not issue a Notice to Proceed until all required documents have been submitted and accepted by Valley Water.
- B. Formation of this Agreement between the Parties requires accomplishment of the following, as applicable:
 - 1) Execution of the Agreement by Consultant;
 - 2) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required insurance coverages and documents;
 - 3) Submission by the Consultant, and acceptance by Valley Water, of evidence of all required Form 700 documents, if applicable;
 - 4) Submission by the Consultant, and acceptance by Valley Water, of all required Non-Disclosure Agreements (NDA) 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.

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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

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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.

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- 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.

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- 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.

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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

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

Attachment One to Schedule D - Fees and Payments
Attachment Two to Schedule D - Schedule of Completion
Attachment Three to Schedule D - Consultant's Key Staff and Subconsultants
Attachment Four to Schedule D - Reference Materials
Attachment Five to Schedule D - RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates

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

1. Conflict of Interest for Future Services

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

- A. 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;
- B. 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
- C. 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 Utility Capital Division Deputy Operating Officer unless delegated to the Capital Engineering Unit Manager.
- C. The Capital Engineering Unit Manager(s) is authorized to approve individual Task Orders in an amount not-to-exceed \$100,000.
- D. The total not-to-exceed amount for any one Task Order shall not exceed \$[NTE Amount]. [NOT USED]

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**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

1. Consultant's Questions and Concerns

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

2. Dispute Resolution

A. Alternate Dispute Resolution

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

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

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

3. Negotiations Before and During Mediation

Negotiations to resolve disputes before and during mediation are initiated for settlement purposes only 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.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

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

E. Vacancies

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

F. Representation

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

G. Time and Place of Mediation

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

H. Identification of Matters in Dispute

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

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.

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

- 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.**

**STANDARD CONSULTANT AGREEMENT
APPENDIX TWO
DISPUTE RESOLUTION**

M. No Stenographic Record

There shall be no stenographic record of the mediation.

N. 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.

O. Exclusion of Liability

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

P. 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.

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

Valley Water: _____

Consultant: _____

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

1. Upon full execution of this Task Order No. _____, as set forth in the Standard Consultant Agreement, Section Twelve Miscellaneous Provisions, subsection 13. Task Orders, and the issuance of a Notice to Proceed by Valley Water Project Manager, the Consultant is hereby authorized to perform the Services described in Attachment A to this Task Order. Any costs incurred, Services performed or expenditures by the Consultant before this Task Order is executed or before the issuance of the Notice to Proceed will be considered outside the contracted Scope of Services and will not be eligible for payment.
2. Both the Scope of Services to be performed and the deliverables to be provided in accordance with this Task Order are described in Attachment A which is attached hereto and incorporated by this reference. Attachment A shall include at a minimum the following:
 - A. The Consultant personnel to be assigned to perform the Services, including resumes if not previously provided to Valley Water;
 - B. The total not-to-exceed fees amount for Consultant to complete the Services, including estimated number of hours required to perform the Services assigned to each Consultant classification;
 - C. Estimated cost of each other direct cost and reimbursable expense, including any applicable fees; and
 - D. 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].

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APPENDIX THREE
TASK ORDER TEMPLATE**

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

8. Signatures:

Signature:

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

DATE

Signature:

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

DATE

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

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

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

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

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

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

Certificates of Insurance

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

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

The certificates will:

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

**Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
Agreement A3926A /CAS No. 4448**

IMPORTANT: The agreement or CAS number must be included.

**STANDARD CONSULTANT AGREEMENT
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INSURANCE REQUIREMENTS**

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 A3626A / CAS No. 4448**

IMPORTANT: The agreement or CAS number must be included.

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

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:

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

- 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. Coverage shall include contractual liability
- c. If coverage is claims-made:
 - i. Certificate of Insurance shall clearly state that the coverage is claims-made.
 - ii. Policy retroactive date must coincide with or precede the Consultant's start of work (including subsequent policies purchased as renewals or replacements).
 - iii. Policy must allow for reporting of circumstances or incidents that might give rise to future claims.
 - iv. Insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract of work.

4. Workers' Compensation and Employer's Liability Insurance

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

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

General Requirements

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

1. **Additional Insured Endorsement(s):** Consultant must provide an additional insured endorsement for Commercial General/Business Liability (for both on-going and completed operations) and Business Automobile liability coverage naming the **Santa Clara Valley Water District, its Directors, officers,**

**STANDARD CONSULTANT AGREEMENT
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INSURANCE REQUIREMENTS**

employees, and agents, individually and collectively, as additional insureds, and must provide coverage for acts, omissions, etc. arising out of the named insureds' activities and work. Other public entities may also be added to the additional insured endorsement as applicable and the Consultant will be notified of such requirement(s) by the District. **NOTE:** This section does not apply to the Workers' Compensation and Professional Liability policies.

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

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

**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

the required insurance coverage.

8. **Coverage to be Occurrence Based:** Except for Professional Liability, all coverage must be occurrence-based coverage. Claims-made coverage is not allowed.
9. **Waiver of Subrogation:** Consultant agrees to waive subrogation against the District to the extent any loss suffered by Consultant is covered by any Commercial General Liability policy, Automobile policy, Workers' Compensation policy described in **Required Coverages** above. Consultant agrees to advise its broker/agent/insurer and agrees to provide evidence (either through the Certificate of Insurance, endorsement or language in the insurance contract) that subrogation has been waived by its insurer.
10. **Non-compliance:** The District reserves the right to withhold payments to the Consultant in the event of material noncompliance with the insurance requirements outlined above.

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**STANDARD CONSULTANT AGREEMENT
APPENDIX FOUR
INSURANCE REQUIREMENTS**

CHECK LIST OF DOCUMENTS NEEDED

General Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	
Auto Liability:	A.	Limits (\$2,000,000)	
	B.	Additional Insured (Endorsement)	
	C.	Waiver of Subrogation (COI, Endorsement or policy language)	
	D.	Primacy (COI, Endorsement or policy language)	
	E.	Cancellation Endorsement	
Umbrella:	A.	Limits (\$)	
	B.	Primacy (Endorsement or policy language)	
Workers Comp:	A.	Limits (\$1,000,000)	
	B.	Waiver of Subrogation (Endorsement or policy language)	
	C.	Cancellation Endorsement	
Professional Liability:	A.	Limits (\$5,000,000)	
	B.	Cancellation Endorsement	

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SCHEDULE D SCOPE OF SERVICES

1. Representatives

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

Patrick Carter, P.E. (Valley Water Project Manager)
Senior Engineer Treatment Plants Project Delivery Unit
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 858-5495

Email: PCarter@valleywater.org

Brandon Ponce, P.E. (Valley Water Unit Manager)
Treatment Plants Project Delivery Unit
Water Utility Capital Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (415) 407-2775

Email: BPonce@valleywater.org

Heath McMahon, P.E. (Deputy Operating Officer)
Water Utility Capital Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-3126

Email: HMcMahon@valleywater.org

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

Greg Lindstadt, P.E. (Consultant Project Manager)
CDM Smith
Vice President
14432 SE Eastgate Way, Suite 100
Bellevue, WA 98007-6493

Phone: (425) 519-8327

Email: lindstadtgl@cdmsmith.com

- 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.

SCHEDULE D SCOPE OF SERVICES

Servando Molina, P.E. (Consultant Principal Officer)
Vice President
CDM Smith
2300 Clayton Road, Suite 950
Concord, CA 94520

Phone: (925) 296-8024
Email: molinas@cdmsmith.com

2. Scope of Services

- A. This Schedule D, Scope of Services describes the professional design services to be performed by Consultant for Valley Water's **Rinconada Water Treatment Plant Reliability Improvement Project** for Tasks 19 through 29. Valley Water may, at its discretion, choose to negotiate an amendment to this Agreement with Consultant, as engineer-of-record, for construction phase engineering support services for RWTP Reliability Improvement Project Phases 3 - 6. Valley Water may, at its discretion, choose to initiate a new consultant agreement selection process for services for any subsequent phase(s) and/or utilize Valley Water staff to perform such services.

3. Project Objectives

- A. The Consultant will provide design services for RWTP Reliability Improvement Project Phases 3 - 6 by repackaging the original Bid Set of documents for the remaining construction phases.
- B. The Consultant will provide design of additional improvements including:
- 1) Ammonia Storage and Feed Facility (preliminary)
 - 2) Plant Water System Upgrade (preliminary and final)
- C. The Consultant will develop Control Algorithms for Project Construction Phases 3-6.
- D. The Consultant will provide Engineering Services During Construction for the Interim Site Restoration Project.

4. Project Background

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

Valley Water is a public agency providing water supply, flood protection, and stream stewardship for Santa Clara County. Valley Water manages an integrated water resources system that includes the supply of clean safe water, flood protection and stewardship of streams on behalf of Santa Clara County's 2 million residents. Valley Water effectively manages ten dams and surface water reservoirs, three water treatment plants, a state-of-the-art water quality laboratory, and more than 275 miles of streams. For information about Valley Water, visit www.valleywater.org.

SCHEDULE D SCOPE OF SERVICES

- B. The RWTP was designed and built over 55 years ago to meet the regulations of the early 1970s. Not only has the plant aged, but regulations have also grown increasingly more stringent across a spectrum of issues. Most notably, the RWTP must now meet higher standards for water quality, seismic and structural integrity, and environmental impacts. Two particular issues are important to address:
- 1) Successfully treating for taste-and-odor causing compounds (e.g., MIB and geosmin) which commonly occur in the sources treated at the RWTP (i.e., the South Bay Aqueduct, San Luis Reservoir, and local water) while improving disinfection capability and providing flexibility to treat contaminants of emerging concern is essential.
 - 2) Providing reliable capacity to meet peak demands since it is Valley Water's sole treatment plant serving the West Pipeline and is only taken off-line in short periods of time for major maintenance projects. RWTP provides water to five of Valley Water's seven retail agencies. These agencies supply drinking water to all or part of the cities of Campbell, Cupertino, Los Gatos, Los Altos, Monte Sereno, Mountain View, San Jose, Santa Clara, Saratoga, and Sunnyvale. Reliability is a key issue for the retail agencies given their limited access to alternative water supply sources and storage.
 - 3) Valley Water selected a robust, tried and true treatment train consisting of: 1) raw water ozonation, 2) conventional flocculation and sedimentation with plate settlers, 3) granular media filters, and 4) a post-filter chlorine contactor. This selected treatment train represents the culmination of a rigorous and thorough process consisting of numerous studies and deliberation. The original RWTP Reliability Improvement Project (RIP) design was completed in January 2015 for the construction of these improvements.
- C. Consultant is the engineer-of-record for the RIP original design, which consisted of six major sequential construction phases; construction of the RIP started in 2015. An amendment to the construction contract reduced the scope of work, resulting in the Contractor completing Phases 1 and 2, and eliminating most of Phases 3, 4, 5 and 6. Completion of the remaining phases requires repackaging of the plans and specifications to reflect the current status of the work. The scope of this Amendment No. 5 includes repackaging the original bid set (design drawings and specifications) to procure a general contractor to construct the remaining construction phases (3 - 6), as well as incorporation of additional improvements which were not part of the original RIP scope.

5. Assumptions and Requirements

A. General Assumptions and Requirements

- 1) **Manage Scope of Services.** Consultant shall manage the Scope of Services such that the work is completed within the Not-to-Exceed Fees limit and in accordance with the Project schedule and ensure that all services and deliverables meet Valley Water and Project 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

SCHEDULE D SCOPE OF SERVICES

presentation and submitted in 5 (five) copies, if requested. Valley Water may require original copies of signed documents and/or scanned (Adobe PDF) versions.

- 3) **Review of Deliverables.** Valley Water will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by Valley Water, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following Valley Water review process. For each deliverable, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant. The comments provided by Valley Water staff during the workshops will be documented by the Consultant as meeting minutes and will be included in the next revision of the documents.
- 4) **Valley Water Quality Environmental Management System.** Valley Water maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines, and work instructions for the performance of various Valley Water work. If requested, Consultant will perform the applicable Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, the VWPM will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the preparation of such deliverables.
- 5) **Consultant Responsibility.** Consultant, with its expertise in performing the Services described herein, is responsible for making the appropriate assumptions in each task to complete each task's deliverables and to achieve the Project objectives of this Agreement as described in Section 3. Project Objectives.
- 6) **Document Control.** Consultant is responsible for establishing and maintaining its own document control system to execute this Scope of Services. An internal document control system for this Project is maintained by Valley Water.
- 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.
- 8) **Completeness.**
 - a. The completeness of a design set is determined primarily by the substance of the materials on the set, including the adequacy of background and relevant information. Three levels of completeness of a design set are defined using these four terms: Partially Complete; Substantially Complete; Virtually Complete; and Complete.
 - b. A Complete Design Set must include all the information required for a constructible set of plans and specifications; include a project cost estimate; and provide sufficient direction to enable the construction to be performed. The set must be ready for engineering certification (stamping, signing and dating) by a

SCHEDULE D SCOPE OF SERVICES

Registered Professional Engineer(s). The set must show the work with complete details and dimensions; identify all constraints; include all background information and provide dimensions, and comply with all drafting, specifications and cost estimating standards.

B. Project-Specific Assumptions and Requirements

- 1) Valley Water will provide review and consolidated comments on draft Technical and Environmental Memos within three weeks.
- 2) Valley Water will provide review and consolidated comments on the repackaged design documents at the 70% level of development. Valley Water will review and provide comments within three weeks.
- 3) Valley Water will provide review and consolidated comments on the design documents for the Plant Water System Upgrade at the 70% and 99% level of development. VW will review and provide comments within three weeks.
- 4) Any comments that increase Project scope and/or budget will require VWPM approval prior to incorporation into the design documents.
- 5) The repackaged design, utilities for future ammonia facility, and plant water improvements will be submitted for review and bid as a single combined design package.
- 6) Consultant's record drawings through Phase 2 and District's Owner Project As-Built Drawings provided by VW will be used as the basis for updating the original design documents and designing new facilities. Consultant will incorporate information documented as part of the Interim Site Restoration Project design effort into the repackaged design documents.
- 7) The design effort will not revisit previous major treatment process decisions and design criteria.
- 8) The design effort will incorporate Design Change Memos (DCMs) that were issued in Phase 2 but not completed during Phase 2 construction.
- 9) If necessary, an Addendum to the original Project Environmental Impact Report will be prepared by Consultant.
- 10) Most recent version of the Standard and Special provisions will be used for this Project.

6. Design Phase Tasks

- Task 1 - Project Management Services (COMPLETED)
- Task 2 - Design Issue Resolution, Data Collection and Investigations (COMPLETED)
- Task 3 - Prepare Basis of Design Report (COMPLETED)
- Task 4 - Environmental Impact Report (COMPLETED)
- Task 5 - Design Documentation Preparation (COMPLETED)
- Task 6 - Construct-ability Review and Risk Management Strategy (COMPLETED)

SCHEDULE D SCOPE OF SERVICES

Task 7 - Bid and Award Services (COMPLETED)
Task 8 - Public Outreach Assistance (COMPLETED)
Task 9 - Supplemental Services During Design (COMPLETED)
Task 10 - Project Management Services During Construction (UNCHANGED)
Task 11 - Submittal Review (UNCHANGED)
Task 12 - Requests for Information Responses (UNCHANGED)
Task 13 - Change Order Assistance (COMPLETED)
Task 14 - Schedule Review and Analysis (COMPLETED)
Task 15 - Engineering Site Support (COMPLETED)
Task 16 - Training Services (COMPLETED)
Task 17 - System Testing and Start-up Services (COMPLETED)
Task 18 - Supplemental Services During Construction (UNCHANGED)

This Amendment No. 5 adds the following new tasks:

Task 19 - Project Management
Task 20 - 70 Percent Repackaging of Design Set for Phases 3-6
Task 21 - Final Document Preparation for Repackaging of Design Set for Phases 3-6
Task 22 - Future Aqua Ammonia Facility
Task 23 - Plant Water System Upgrade
Task 24 - Control Algorithms for Remaining Project Construction Phases
Task 25 - Public Outreach Assistance
Task 26 - Environmental Documentation Services
Task 27 - Engineering Services During Construction (ESDC) of the RWTP Interim Site Restoration Project
Task 28 - Bid and Award Services for RWTP Reliability Improvement Project Phases 3-6
Task 29 - Supplemental Services

Task 19 - Project Management

The purpose of this task is for Consultant to manage the Scope of Services for Tasks 19 through 29 such that the work is completed within the not-to-exceed fees limit stated in Attachment One to Schedule D, Fees and Payments, and in accordance with the Project Schedule stated in Attachment Two to Schedule D, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet Valley Water and Project requirements.

19.1 Kickoff Meeting

Consultant will attend kickoff meeting with Valley Water. The purpose of the kickoff meeting is to introduce key Valley Water and Consultant team members to one another, acquaint all participants with the purpose of and expectations for the Project, describe team members' roles and responsibilities, describe Project procedures, and summarize scope and schedule.

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

19.2.1 The Project Design Work Plan shall include Project objectives, requirements, constraints, a detailed Project Schedule (showing major tasks and deliverables), a breakdown of Consultant's costs for the major tasks, a list of the Consultant's team members and their

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roles and responsibilities, communication protocols (internal and external), document control procedures, and other administrative procedures.

- 19.2.2 The Project Design Work Plan shall include a Project Quality Assurance and Quality Control (QA/QC) Plan documenting Consultant's procedures to ensure Consultant's services and deliverables meet Valley Water requirements and accepted practices and standards of the Consultant's profession. Valley Water reserves the right to request and review the Consultant's Project documentation demonstrating its adherence with their own quality assurance procedures.
- 19.3 Managing Team and Coordination and Communications with Valley Water.** Consultant will manage the design preparation and progress, subconsultant agreements and communications, quality management, Project closeout, submittals to and interactions with Valley Water, and assist the VWPM with coordination and communication with appropriate regulatory or other agencies, as necessary.
- 19.4 Progress Meeting and Workshops.** Valley Water and Consultant key staff and subconsultants, as determined necessary and appropriate by Consultant, subject to VWPM approval, or at Valley Water's direction, will coordinate and attend monthly progress meetings and workshops with Valley Water staff, regulatory and resource agencies, and review boards, as needed, to review, discuss and 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 meeting date will be established by Valley Water, and be held either in person, or by phone, at Valley Water's discretion.
- 19.5 Weekly One-on-One Meetings with Valley Water.** Consultant Project Manager must provide a brief update of the team's work activities completed within the week, 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 and conducted by phone.
- 19.6 Communication with External Agencies.** At Valley Water's request, Consultant will assist the 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 design activities as requested by Valley Water.
- 19.7 Public Outreach.** If requested, consistent with Task 25 Public Outreach, Consultant will provide support and assistance with Valley Water's public outreach activities. Such assistance may include 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 other tasks as directed by the VWPM.
- 19.8 Project Reports and Billing.** Consultant will furnish monthly progress reports to Valley Water. The purpose of this report is to document the work completed and the execution of the tasks described in the Scope of Services, and to allow Valley Water to evaluate, at its reasonable discretion, the Consultant's progress, and performance. The monthly progress report will include:

SCHEDULE D SCOPE OF SERVICES

- 19.8.1 An assessment of actual versus planned progress in completing the Scope of Services, including a description of the tasks and deliverables completed to date.
- 19.8.2 For each task, the percentage of services performed versus the percentage of fees incurred for such task, and explanation of any significant variances in percentage of services performed compared to percentage of fees incurred.
- 19.8.3 For each task, the percentage of the fees incurred for such task compared to dollar amount allocated to such task.
- 19.8.4 A statement that progress towards performance of the services is on schedule within the timeline set forth in in the Schedule; 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 timeline for implementation of such measures.
- 19.8.5 A look-ahead schedule listing deliverables and activities planned for the next 2 months.
- 19.8.6 A summary of proposed changes to the Scope of Services including justifications for such changes.
- 19.8.7 Action Item and Decision Log: This log will document action items and Project concerns and issues throughout the Agreement duration which require resolution by Valley Water and/or Consultant.
- 19.8.8 Draft Billing statements, transmitted with the monthly progress reports, will be organized such that the billing categories correspond with the Scope of Services tasks. Draft invoices will include a summary of labor expenditures, direct costs, and billed subconsultant charges. Draft Invoices will be prepared in accordance with the requirements stated in the Standard Consultant Agreement, Section Four, Fees and Payments, paragraph 2. Consultant's Monthly Invoices. An Adobe PDF version will be provided by Consultant for preliminary review by Valley Water.
- 19.9 Risk Management Plan.** Consultant will use a systematic approach to identifying (Risk Register), assessing, and responding to risks to manage or reduce potential adverse effects on the achievement of the Project goals during the design execution. The Consultant's Risk Management Plan (RMP) will determine the costs and time associated with strategies used to overcome the risks, and the resulting impacts to the design schedule and scope of work. The Risk Management Plan will utilize periodic monitoring and control efforts sufficient to ensure execution of strategies are deployed to effectively manage the risk. This Plan will be updated bimonthly and submitted with the Monthly Progress Reports.

Task 19 - Deliverables

- 1. Project Design Work Plan including QA/QC Plan (Draft, and Final)
- 2. Meeting agendas, minutes, and presentations
- 3. Weekly meetings/conference calls attendance and notes; frequency of meetings and/or calls will be at Valley Water's discretion
- 4. Decision Log maintained continuously and submitted monthly.
- 5. Monthly progress reports sent electronically.

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6. Risk Management Plan (Draft, Final and Bimonthly updates).
7. Monthly draft and final invoices sent electronically.
8. File sharing site for formal delivery and receipt of formal design deliverable files, responses, and other large files as needed.

Task 19 - Assumptions

1. Valley Water will endeavor to resolve issues that impact scope and schedule within 5 working days of provision of information from Consultant.
2. Valley Water will coordinate progress meeting logistics such that critical team members are present for scheduled meetings. External participants may be invited by Valley Water or by Consultant with Valley Water PM pre-approval to attend these meetings when appropriate.
3. The Project kickoff meeting will last 2 to 4 hours. Kickoff Meeting may be virtual pending in-person protocols prevailing at the time.
4. Monthly progress meetings will be held virtually pending evolution of in-person protocols. When possible, and at the discretion of the Valley Water PM, meetings will be held at Valley Water facilities. It is anticipated that in-person meetings will be held either at the Rinconada WTP in Los Gatos or Valley Water Headquarters in San Jose. Eight face-to-face meetings and 8 conference call meetings are assumed, each lasting 1 to 2 hours. In-person attendance at meetings will be by the Consultant PM only.
5. Consultant's Project work plan will be concise, directed toward the Consultant team.
6. Comments and correspondence will be routed first through the Valley Water and Consultant Project Managers to maintain a clear line of communication.
7. The Risk Management Plan will be applicable to on time and on budget execution of the design, and not construction period risks.
8. Design and bid and award period will total 16 months.
9. For budgetary purposes, additional engineering support may be scoped and paid for as Task 29 Supplemental Services.

Task 20 - 70 Percent Repackaging of Design Set for Phases 3 - 6

The original bid set for the Project consisted of 1,000 design drawings and 229 technical specification sections (Division 1 through 16). To competitively procure a general contractor to implement the remaining construction phases (3 - 6) of the Project, the original bid set needs to be repackaged. The design drawings and specifications need to be reviewed and revised to delineate and represent the work to be completed by a new general contractor. The level of completeness will be Substantially Complete to Virtually Complete and ready for permitting agency review.

- 20.1 Receive Record Drawings and create Drawing Files.** Consultant will receive record drawing files from Valley Water and set up file folders and directory for the design drawing set.

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- 20.2 Review Record Drawings.** Consultant will review the record drawings provided by Valley Water and its own Engineer-of-Record record drawing markups and compare them to the known status of original RWTP Reliability Improvement Project (RIP), as documented in the final Phase 2 Transition Report prepared by the Consultant in December 2020. Consultant will identify any apparent discrepancies to Valley Water for resolution. Consultant will also compare with internal records prepared during the Phase 2 construction period.
- 20.3 Revise Drawings.** Consultant will revise the record drawing files to delineate work to be done by the new contractor for Phases 3 - 6. Items that will be updated are listed in Schedule D, Scope of Services, Attachment Five, RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates. The original design will not be changed except for those items specifically listed.
- 20.4 Revise and Expand P&IDs.** The P&IDs in the original design were prepared using a fully developed P&ID for the first unit of systems having multiple similar elements, with tag numbers for the similar follow-on units tabulated. Valley Water desires that the existing finished P&IDs for all major treatment process systems be revised to have all major treatment system elements fully depicted. For treatment processes in the repackaged project, the Consultant will:
- A. Create additional drawing sheets as needed to fit the follow-on elements.
 - B. Delete extraneous piping and line work on original or new sheets
 - C. Revise tag numbers
 - D. Revise original sheets and new sheets as needed for correct sheet cross-references and continuation arrows
 - E. Revise other existing documents as needed to coordinate the new sheet numbers, including sheets in other disciplines and specifications, such as electrical control schematics, I/O Lists, Instrument Lists, and process mechanical references.
- 20.5 Revise Specifications.** Consultant will revise the original specification files to delineate the work to be done by the new contractor for Phases 3 - 6. Items that will be updated are listed in Schedule D, Scope of Services, Attachment Five, RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates. The original design will not be changed except for those items specifically listed.
- 20.6 70% Opinion of Probable Construction Cost.** Consultant will prepare and submit an AACE Class 3 construction cost estimate. Cost estimates for the most significant lines of the work breakdown structure will be "bottom-up" estimates based on assumed productivity, equipment, and labor spreads for the activities. The basis for field and office overhead, other markups, and profit will be clearly identified in the estimate.
- 20.7 Construction Schedule.** Consultant will prepare a draft Construction Schedule.
- 20.8 Revise Drawings and Specifications for Phase 2 DCMs.** Many DCMs issued during the Phase 2 construction period were not completed or were only partially completed by the Phase 2 contractor. Consultant will research DCM status (using the Valley Water document management system and limited field verification) and revise drawing and specification files as necessary to include work from issued DCMs that is found still needing to be completed. DCMs that will be researched include, but are not limited to,

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those that are listed in Schedule D, Scope of Services, Attachment Five, RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates.

- 20.9 Revise Drawings and Specifications for Owner-furnished items.** Phase 2 was completed with a significant amount of material and equipment for later Phases procured but not installed. Consultant will work with Valley Water to:
- A. Identify available records of procured items (delivered to site, delivered to off-site storage, and not delivered).
 - B. Assess viability for future use (adequacy of documentation, warranty implications, technical applicability with delay, replacement cost, salvage or disposal cost).
 - C. Prepare a brief technical memorandum (TM) to document conclusions and decisions regarding owner-furnished items.
 - D. Revise drawings and specifications to incorporate items selected as still viable for use.
 - E. Assess constructability and potential project delays resulting from use of owner furnished equipment.

- 20.10 Revise Drawings and Specifications for Phase 2 Lessons Learned.** In addition to the items listed in Schedule D, Scope of Services, Attachment Five, RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates, Consultant will review other Phase 2 topics and discussions with Valley Water and identify additional revisions to the drawings and specifications, including ozone system control descriptions, relocated VFD for finished water booster pump, revised filter gullet vent valves, and other potential refinements. Lessons learned will refine requirements for Phases 3 - 6, not change completed Phase 2 work.

20.11 Revise Design to Current Codes.

- 20.11.1 The original RIP upgrades were designed to the 2013 California Building Code. With the delayed construction progress, two code update cycles have occurred since the original design (2016 and 2019). Consultant will review the building code changes, review the original design calculations and update forces as needed, determine if wall thicknesses or reinforcing changes are needed to address the higher forces, and update the drawings as needed.
- 20.11.2 Consultant will review code requirements for architectural considerations including potential impacts to common path of egress travel and allowable building area calculations, stormwater handling, and landscape irrigation.
- 20.11.3 Consultant will review the NEC (NFPA 70) and the Electrical Safety in the Workplace, which have also gone through two update cycles.
- 20.11.4 Codes to be reviewed are:
- A. California Building Code
 - B. California Fire Code
 - C. California Mechanical Code
 - D. California Electrical Code and National Electrical Code

- 20.12 Field Investigation.** Consultant will pothole for existing utility locations to verify buried as-built locations and potential conflicts between new and existing underground facilities for a limited number of critical elements. These field investigations will not provide comprehensive as-built documentation.

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- 20.12.1 Perform the fieldwork excavation, backfilling, restoration or patching of pavement or structures, inspection of potholing effort and schedule in cooperation with the District.
- 20.12.2 Perform survey to locate the locations of potholing using previous project survey controls.
- 20.12.3 Document information collected including surrounding finished grade, depth to what feature/size and location of the utility found, (e.g., "top of 12-inch CMP").
- 20.12.4 Provide District with photographs of potholing locations with the data collected.
- 20.12.5 Provide no more than 20 potholes up to 10 feet deep. Consultant staff will witness potholing.
- 20.12.6 Provide civil, process mechanical, electrical, and I&C site visits for field review and verification of limited key record drawing items.
- 20.12.7 Review buried electrical ductbanks at pull boxes to assess conduits installed in Phase 2.
- 20.12.8 Update Valley Water record drawings with information obtained during site visits.
- 20.13 Incorporation of Interim Site Restoration Project and Residuals Remediation Project.** Consultant will incorporate recorded information on conditions gathered during the Interim Site Restoration Project design effort, and changes to the original design made as part of the Interim Site Restoration Project design effort, into the repackaged design documents.
 - 20.13.1 Consultant will review the Residuals Remediation Project bid documents prepared by others to identify other changes to Rinconada WTP that may have implications for the repackaging of the original design. If any additional impacts are identified, implications for the repackaging design will be assessed, and additional design efforts will be undertaken with the authorization of the VWPM, and budget provided under Task 29 Supplemental Services.
 - 20.13.2 Consultant will indicate by clouding or other annotation in the repackage design drawings the areas of the site reserved for the Residuals Remediation Project.

Task 20 - Deliverables

- 1. 70% Plans and Specifications for Phase 3 - 6
- 2. 70% Revised and Expanded P&IDs
- 3. AACE Class 3 Construction Cost Estimate
- 4. Draft Construction Schedule
- 5. TM discussing owner-furnished items
- 6. TM outlining additional lessons learned not included in Schedule D, Scope of Services Attachment 5 RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates.

Task 20 - Assumptions

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1. Consultant will use Valley Water's Owner Project As-Built Record Drawings as the basis for the new design files; these will be augmented by the Consultant records and limited field investigation as described herein. It is understood that the field investigations will not be a complete and comprehensive verification of the record drawings. It is understood that any differing conditions not identified by the limited field investigations will be addressed as part of the change order process during construction.
2. Surveying of potholed items will be accomplished in one day after potholing has been completed.
3. Up to 5 days of surveying are assumed for record drawings verification, utility, and localized topographic surveys. Additional days of surveying, if required, will be authorized by Valley Water as Task 29 Supplemental Services.
4. Drawings and specifications related to replacing the liner of the Rinconada Reservoir will not be updated and will not be included in the Repackaged Design document set.
5. A total of 10 person-days on site for civil / process mechanical is included for Field Investigations.
6. A total of 10 person-days on site for electrical / I&C is included for Field Investigations.
7. Conduits in Phase 2 Ductbanks were tagged as specified (needed for confirmation of installed status and preparation of repackaged design drawings).
8. Electrical and control elements that cannot be investigated without plant disruption will be assumed to have been constructed per design, and the repackaging effort will proceed on that basis until the first opportunity to investigate during a scheduled plant shutdown period. A plan for addressing any impacts found will be developed at that time.
9. Any significant design changes identified as needed for compliance resulting from current code review, other than the already-identified structural revisions, will be first discussed with VW to determine how to proceed. Changes in the CA Fire Code or Title 24 that would change the HVAC, plumbing, or Fire Protection design for the Ozone Generator Building are not anticipated.
10. Except as noted above and in Schedule D, Scope of Services, Attachment Five, RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates, the original design will be maintained.
11. For subsequent District use (e.g., consolidated project record drawings, reference material for plant O&M manual and SOPs), work delineation for new contractor, design efficiency and cost effectiveness, drawings and specs from the original bid set will be kept and reused, where practicable, in the repackaged set. This may include removal or annotation of any fully completed sheets from Phases 1 and 2, so that the repackaging documents are clear to bidders.
12. P&ID expansion will be accomplished by either addition of information to existing sheets, or creation of new sheets, whichever is most efficient. It is anticipated that 8 P&IDs can be expanded on the existing sheets. Due to existing drawing congestion, the following additional sheets are anticipated:

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- A. Ozone Contactor Systems - 3 sheets
- B. Ozone Generation Gas Systems - 2 sheets
- C. Ozone Generation Water Systems - 2 sheets
- D. Flash Mix - 1 sheet
- E. Floc/Sed Basins - 3 sheets
- F. Filters 2-12 - 11 sheets
- G. Filter Manual Backwash Controls - 5 sheets
- H. Filter Air Scour System - 1 sheet
- I. Washwater Recovery Facility - 7 sheets
- J. Chlorine Contact Basin - 3 sheets
- K. Carbon Dioxide Facility - 1 sheet
- L. Sodium Hypochlorite Storage - 2 sheets
- M. Sodium Hypochlorite metering - 4 sheets
- N. Fluoride Facility - 3 sheets
- O. Aqua Ammonia - 3 sheets
- P. Caustic - 2 sheets
- Q. Liquid Alum - 3 sheets
- R. Existing Hypochlorite Facility Modifications - 1 sheet
- S. Nonionic Polymer - 2 sheets

13. The following P&IDs are not anticipated to need expansion:

- A. 1I-1, 1I-2
- B. 2I-2, 2I-3, 2I-5, 2I-6
- C. 3I-3, 3I-5, 3I-6, 3I-7
- D. 6I-2, 6I-3
- E. 7I-1, 7I-5, 7I-6
- F. 8I-2
- G. 10I-2
- H. 11I-6, 11I-7
- I. 13I-1, 13I-2, 13I-3
- J. 14I-1
- K. 19I-1, 19I-2
- L. 21I-2
- M. 22I-1, 22I-2
- N. 23I-1
- O. 25I-2
- P. 28I-2, 28I-3
- Q. 36I-1
- R. 99I-1, 99I-2

14. The Geotechnical subconsultant will not prepare a revised geotechnical report. They will only provide revised seismic design parameters to reflect current design code requirements.

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15. Constructability review will be performed by others and will occur early in the 70% design period.
16. Specifications will be updated to replace outdated instrumentation models and reflect current Valley Water preferences.
17. The 70% and 99% design document reviews will be conducted using Bluebeam Revue, allowing Valley Water staff to make comments directly on to the documents and to see the comments others have made before them; this will also be used to create the comprehensive spreadsheet file of all comments received for Consultant response.
18. Valley Water will provide printed sets for internal staff review as desired from the pdf files provided by Consultant.
19. Valley Water will edit and compile all Valley Water comments received outside the Bluebeam Revue Session and add those comments to the Excel spreadsheet for review and response by Consultant.
20. Valley Water will provide documentation of the inventory of procured but not installed materials and equipment to be assessed. Consultant travel for assessment will be limited to no more than 10 total travel days and no more than 2 trips outside California. Travel will be subject pandemic restrictions.
21. Review and assessment of RWTP Residuals Remediation Project design impacts is based on one week of review and analysis by Civil, Process Mechanical, Electrical, and I&C disciplines.
22. The repackaged design documents will be updated to cite the current versions of applicable codes listed in Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6, 20.11. Revise Design to Current Codes, 20.11.4, at the time of submission.
23. For budgetary purposes, additional engineering design services may be scoped and paid for as Task 29 Supplemental Services.

Task 21 - Final Document Preparation for Repackaging of Design Set for Phases 3 - 6

The 100% Design Set will be a fully completed, signed, and sealed set of Plans, Specifications and Cost Estimate that is ready for construction bidding. The 70% design set will be revised, as necessary, to address Valley Water comments.

- 21.1 Respond to Valley Water Comments.** Consultant will prepare written responses to Valley Water comments on the 70% design documents. Valley Water will review responses and confirm acceptance.
- 21.2 100% Drawings.** Consultant will prepare and submit 100% Drawings for the Bid Set (signed and stamped) that address 70% review comments and design modifications or clarifications, as required. Consultant will also include all Engineering Analysis and Calculations completed and checked as per the QA/QC Plan.

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- 21.3 100% Revised and Expanded P&IDs.** Consultant will prepare and submit 100% Drawings for the Bid Set (signed and stamped) that address 70% review comments and design modifications or clarifications, as required.
- 21.4 100% Specifications.** Consultant will prepare and submit 100% Specifications for the Bid Set (signed and stamped) that address 70% review comments and design modifications or clarifications, as required.
- 21.5 100% Opinion of Probable Construction Cost (OPCC).** Consultant will prepare and submit a 100% Class 2 opinion of probable construction cost estimate as defined by AACE, updated to reflect the final design drawings and specifications.
- 21.6 100% Construction Schedule.** Consultant will prepare and submit an updated draft of the construction schedule reflecting the final design drawings and specifications.

Task 21 - Deliverables

1. 70% Design Comments Resolution Form
2. 100% Drawings
3. 100% Specifications
4. 100% Revised and Expanded P&IDs
5. AACE Class 2 Opinion of Probable Construction Cost
6. Updated Construction Schedule
7. Engineering Analysis and Calculations as needed for updates or changes to the original design
8. Bid Set that includes Final Plans and Specifications (signed and stamped), including Standard Provisions, Special Provisions, Technical Provisions, Appendices, Notice to Bidders, original and revised Geotechnical Reports, and other bid documents

Task 21 - Assumptions

1. Consultant will provide responses to Valley Water comments on the 70% design in the Excel spreadsheet provided by Valley Water, including a column for resolution/acceptance by Valley Water.
2. Valley Water may elect to identify up to three bid alternatives for which the Contractor is to identify the bid price for either including or excluding from the construction work.
3. Consultant will indicate bid alternative scope on up to 8 drawings per alternative, using clouding or annotation to define the applicable elements.
4. Consultant will provide draft language for use by Valley Water in procurement documents to coordinate the identification and evaluation of bid alternatives.
5. Full size drawings will measure 22" by 34" with half size as 11" by 17."
6. All drawings will be created and completed in AutoCAD 2018 version and will be 22-inch by 34-inch in size.
7. Valley Water will lead the preparation of the Standard Provisions; Consultant will lead the preparation of the Special Provisions with input from Valley Water.

SCHEDULE D SCOPE OF SERVICES

8. For budgetary purposes, additional engineering design services may be scoped and paid for as Task 29 Supplemental Services.

Task 22 - Future Aqua Ammonia Facility

Valley Water would like to design and install underground utilities associated with a future ammonia chemical storage and feed system. This task will site the facility, provide a planning level design in a Basis of Design Technical Memorandum, and provide new drawing sheets for underground utilities that can be used by a future project. The purpose of this underground work is to minimize the disturbance to newly constructed facilities of the Reliability Improvement Project when the future aqua ammonia facility is constructed at a later date.

22.1 Aqua Ammonia Facility Basis of Design (BOD) Technical Memorandum

- 22.1.1 Consultant will prepare a Technical Memorandum (TM) that will define the basic criteria and guidance for design of a new Aqua Ammonia Facility. The TM will:

- A. Include Valley Water basic operations requirements, Project performance requirements, and other stakeholders' design criteria as identified by Valley Water.
- B. Identify known relevant constraints such as environmental restrictions or code compatibility/separation requirements. Pertinent codes and references will be cited.
- C. Include a description of the new system elements and a general arrangement of the new facilities.
- D. Include a summary of the anticipated system and facility materials.
- E. Indicate points of connection to existing or future Phase facilities, including roadways, electrical service, control network, and chemical distribution.

- 22.1.2 Valley Water will review the draft TM and provide comments. Consultant will conduct a review workshop with Valley Water to discuss design criteria, facility arrangement and provisions, and key Valley Water comments.

- 22.1.3 Consultant will provide written response to Valley Water comments.

- 22.1.4 Consultant will revise the TM to reflect final decisions.

22.2 Future Aqua Ammonia Facility Design

22.2.1 70% Design

- 22.2.1.1 Consultant will prepare 70% design drawings and specifications for underground utilities for the future ammonia facility, including chemical delivery, chemical feed, electric power conduits, and control signal conduits, and submit to Valley Water for review and comment.

- 22.2.1.2 Underground utilities design will be incorporated into the 70% Opinion of Probable Construction Cost (OPCC) and draft construction schedule prepared under Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6.

- 22.2.1.3 Valley Water will review the 70% design submittal and provide comments. Consultant will conduct a review workshop with Valley Water to discuss design details, additional design development to come, and key Valley Water comments.

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22.2.1.4 Consultant will provide written response to Valley Water comments to document final design development decisions.

22.2.3 99% Final Design

22.2.3.1 Consultant will prepare 99% design drawings and specifications for underground utilities for the future ammonia facility, including chemical delivery, chemical feed, electric power conduits, and control signal conduits, and submit to Valley Water for review and comment.

22.2.3.2 Valley Water will review the 99% design submittal and provide comments. Consultant will conduct a review workshop with Valley Water to discuss design details and key Valley Water comments.

22.2.3.3 Consultant will provide written response to Valley Water comments to document final design development decisions.

22.2.4 100% Final Design

22.2.4.1 Consultant will prepare 100% design drawings and specifications for underground utilities for the future ammonia facility, including chemical delivery, chemical feed, electric power conduits, and control signal conduits, and submit to Valley Water for advertisement and bidding.

22.2.4.2 Consultant will update the 70% Opinion of Probable Construction Cost (OPCC) and draft construction schedule to reflect the final design for the underground utilities for the future ammonia facility and incorporate into those prepared under Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6.

Task 22 - Deliverables

1. Aqua Ammonia Basis of Design Tech Memo
2. TM Review workshop Agenda and Minutes
3. TM Comment Resolution Document
4. 70% Drawings and Specifications
5. 70% Review Workshop Agenda and Minutes
6. 70% Design Comment Resolution Document
7. 99% Drawings and Specifications
8. 99% Review Workshop Agenda and Minutes
9. 99% Design Comment Resolution Document
10. 100% Drawings and Specifications

Task 22 - Assumptions

1. The future ammonia storage and metering facility will be located immediately south of the new sodium hypochlorite facility and west of the new Chlorine Contact Basin that are currently part of the original design.

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2. The Waterwise Garden next to the new sodium hypochlorite facility will remain as originally designed. Any revisions required to allow construction of a future ammonia facility will be accomplished as part of and at the time of the future ammonia facility design.
3. The new ammonia chemical system will have the same “look and feel” as the new sodium hypochlorite system that is currently part of the Project Bid Set (i.e., storage tanks and metering pumps to be located within a concrete containment area covered by a metal canopy).
4. Underground chemical feed ductbanks that will supply ammonia from the future storage and feed facility for Rinconada Reservoir will not be routed all the way to the Reservoir but will be routed far enough that the remainder may be added in the future without disrupting WTP operations.
5. Ammonia basis of design memo will include preliminary level P&IDs without details on controls and interface with SCADA. Specifications will not be developed.
6. Valley Water will provide a single consolidated set of review comments at each review step.
7. For budgetary purposes, additional engineering design services may be scoped and paid for as Task 29 Supplemental Services.

Task 23 - Plant Water System Upgrade

Consultant will design upgrades to the plant's water system to meet the projected plant water demands.

23.1 Basis of Design Technical Memorandum (TM)

Consultant will prepare a draft Basis of Design Technical Memorandum that will confirm the basic criteria and guidance for design of the plant water system upgrades. For the TM, Consultant will:

- 23.1.1 Develop design criteria and performance requirements
- 23.1.2 Develop system curve for existing and planned plant water uses.
- 23.1.3 Identify pump and hydropneumatics tank capacity alternatives
- 23.1.4 Confirm Valley Water basic operations requirements and other stakeholders' design criteria as identified by Valley Water.
- 23.1.5 Prepare a preliminary P&ID drawing reflecting the upgraded system
- 23.1.6 Perform a surge evaluation to confirm performance and sizing.
- 23.1.7 Include a description of the new system elements, locations, and a general arrangement of the new elements and indicate points of connection to existing or future Phase facilities, including electrical service, control network, and water distribution piping.
- 23.1.8 Conduct a site visit to gather information on the existing system as needed.
- 23.1.9 Conduct a review workshop with Valley Water to discuss design criteria, facility arrangement and provisions, and key Valley Water comments.

23.2 Basis of Design Technical Memorandum

Consultant will prepare a final Basis of Design TM:

SCHEDULE D SCOPE OF SERVICES

- 23.2.1 Provide written response to Valley Water comments.
- 23.2.2 Revise the TM to reflect final decisions.

23.3 70% Design Document Preparation

- 23.3.1 Consultant will prepare revisions to existing yard piping drawings for new system elements and connections.
- 23.3.2 Consultant will prepare revised and new drawings of the existing plant water pump facility for new equipment and upgraded pipe sizes.
- 23.3.3 Consultant will prepare draft drawings for the hydro-pneumatic tank and facility.
- 23.3.4 Consultant will prepare draft specifications for new pumps, piping, valves, and tank.
- 23.3.5 Consultant will develop 70% OPCC for the new plant water facilities and incorporate into the OPCC prepared under Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6.
- 23.3.6 Valley Water will review the 70% design submittal and provide comments. Consultant will conduct a review workshop with Valley Water to discuss design details, additional design development to come, and key Valley Water comments. Consultant will provide written response to Valley Water comments to document decisions for the final design.

23.4 99% Design Document Preparation

- 23.4.1 Consultant will revise yard piping drawings in response to comments, bring to completion, and submit to Valley Water for review and comment.
- 23.4.2 Consultant will revise drawings of the plant water pump facility in response to comments, bring to completion, and submit to Valley Water for review and comment.
- 23.4.3 Consultant will revise drawings for the hydro-pneumatic tank and facility in response to comments, bring to completion, and submit to Valley Water for review and comment.
- 23.4.4 Consultant will revise specifications for new pumps, piping, valves, and tank in response to comments, bring to completion, and submit to Valley Water for review and comment.
- 23.4.5 Valley Water will review the 99% design submittal and provide comments. Consultant will conduct a review workshop with Valley Water to discuss design details and key Valley Water comments. Consultant will provide written response to Valley Water comments to document final design development decisions.

23.5 100% Design Document Preparation

- 23.5.1 Consultant will revise yard piping drawings in response to comments and submit to Valley Water for advertisement and bidding.
- 23.5.2 Consultant will revise drawings of the plant water pump facility in response to comments and submit to Valley Water for advertisement and bidding.
- 23.5.3 Consultant will revise drawings for the hydro-pneumatic tank and facility in response to comments and submit to Valley Water for advertisement and bidding.

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- 23.5.4 Consultant will revise specifications for new pumps, piping, valves, and tank in response to comments and submit to Valley Water for advertisement and bidding.
- 23.5.5 Consultant will update the 70% OPCC to reflect the final design for the new plant water facilities and incorporate into the OPCC prepared under Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6.

Task 23 - Deliverables

- 1. Plant Water Basis of Design TM
- 2. TM Review workshop Agenda and Minutes
- 3. TM Comment Resolution Document
- 4. 70% Drawings and Specifications
- 5. 70% Review Workshop Agenda and Minutes
- 6. 70% Design Comment Resolution Document
- 7. 99% Drawings and Specifications
- 8. 99% Review Workshop Agenda and Minutes
- 9. 99% Design Comment Resolution Document
- 10. 100% Drawings and Specifications

Task 23 - Assumptions

- 1. Plant water system upgrades will include:
 - A. Addition of a backup (fourth) pump for redundancy.
 - B. Revisions to the control descriptions of the existing plant water pumps to allow three pumps to run automatically.
 - C. Upsizing the existing pump suction and discharge piping to reduce high velocities.
 - D. Upsizing portions of existing piping and adding additional loops to the yard piping to reduce velocities and remove dead ends in the piping system.
 - E. A hydro-pneumatic or bladder tank to mitigate potential pressure surge and water hammer concerns in the piping system.
- 2. A fourth pump can be constructed next to the existing three plant water pumps, so a second pressure zone will not be required.
- 3. Valley Water will provide the projected water demands for the residuals management system identified by others.
- 4. Design of improvements (e.g., pressure regulating valves, flow control valves, flow meters, etc.,) specific to the plant's residual management system facilities (e.g., gravity thickeners, buildings housing mechanical dewatering equipment, etc.,) will be by others.
- 5. Valley Water will provide a single consolidated set of review comments at each review step.
- 6. For budgetary purposes, additional engineering design services may be scoped and paid for as Task 29 Supplemental Services.

Task 24 - Control Algorithms for Remaining Project Construction Phases

SCHEDULE D SCOPE OF SERVICES

- A. During the construction of RIP Phase 2, Valley Water issued a task order to the Consultant to develop control algorithms for the facilities constructed as part of Phase 2. Under this Task, the Consultant will develop similar control algorithms for the facilities of construction phases 3-6 so that the control descriptions can be reviewed and revised, if needed. The control algorithms will also facilitate better understanding of start-up and operational strategies for clearer guidance to the Project's integrator for programming.
- B. Consultant will use control descriptions and strategies for loops developed in the original design related to equipment such as basins, mixers, pumps, gates and valves and graphically map relationships using a visual tool (Control Algorithm Figure) to assist operators and Valley Water staff with graphical representation of the system/equipment/process. Consultant will provide control algorithm figures that have an overview flow chart for each process area in Phases 3 - 6 of the project followed by loop diagrams for each equipment within that process area showing logical implementations interlocks, permissives, and Input/Output signals to SCADA.
- C. The Control Algorithm Figures will show logical implementations of alarms, set points for level/alarms, interlocks, lead/lag arrangement and hierarchy, triggers for on/off, alternative modes of operation that are already outlined in Contract Documents Technical Specifications Section 13482.

24.1 Phase 4 Control Algorithm Development.

Consultant will prepare preliminary control algorithm materials for the following:

- 24.1.1 Kickoff Meeting
- 24.1.2 Ozone System
- 24.1.3 Filters, Air Scour, and Backwash Water System
- 24.1.4 Chlorine Contact Basin
- 24.1.5 Chemical Systems
- 24.1.6 Coordination with design team and Valley Water
- 24.1.7 Revisions to existing control descriptions

24.2 Phase 4 Control Algorithm Workshops

Consultant will provide the following:

- 24.2.1 Virtual workshops
- 24.2.2 Ozone System
- 24.2.3 Filters, Air Scour, and Backwash Water System
- 24.2.4 Chlorine Contact Basin and Chemical Mixing Pumps
- 24.2.5 Chemical Systems
- 24.2.6 Draft Control Algorithms
- 24.2.7 Final Control Algorithms

24.3 Phase 5 Control Algorithm Development.

Consultant will prepare preliminary control algorithm materials for the following:

- 24.3.1 Waste Containment Facility
- 24.3.2 Chemical System Modifications

SCHEDULE D SCOPE OF SERVICES

24.3.3 Coordination with design team and Valley Water

24.3.4 Revisions to existing control descriptions

24.4 Phase 5 Control Algorithm Workshops

Consultant will provide the following:

24.4.1 Virtual workshops

24.4.2 Chemical System Modifications and Waste Containment

24.4.3 Draft Control Algorithms

24.4.4 Final Control Algorithms

Task 24 - Deliverables

1. Kickoff Meeting Agenda and Minutes
2. Electronic copies for each process area of the Draft Control Algorithm Figures in pdf format (each for Phase 4 and Phase 5)
3. Electronic copy of the Draft Control Algorithms Document in pdf format (each for Phase 4 and Phase 5)
4. Electronic copy of the Final Control Algorithms Document in pdf format (each for Phase 4 and Phase 5)
5. Control Algorithm Workshops Agenda, Materials, and Minutes (each for Phase 4 and Phase 5)
6. Hard copy of the Draft Control Algorithm Figures Document for each process area for discussion during Workshops (each for Phase 4 and Phase 5)
7. Hard copy of the Draft Control Algorithms Document for discussion during Workshops (each for Phase 4 and Phase 5)

Task 24 - Assumptions

1. The approach for Task 24 will be generally similar to that followed during the Phase 2 control algorithm development.
2. Each control system algorithm will capture and document the following information:
 - A. Process Area Overview Flow Chart
 - B. Control Loop Diagrams for equipment in the process including:
 - 1) Interlocks
 - 2) Alarms
 - 3) Process Control Calculations already written in Section 13482 and any modifications during construction phase through RFIs, Change Orders, and submittals
 - 4) Inputs and Outputs
 - 5) Operator commands and setpoints
 - 6) PLC Programming Blocks indicating various operation modes and response to events and/or alarms as specified in Section 13482 or revised during construction
3. Workshops will be conducted virtually.
4. Consultant will use the PLC/HMI standards documentation provided during Phase 2.
5. Layout and format of control algorithms will follow Phase 2 control algorithms.
6. It is expected that the Microsoft Office Visio tool will be used to produce the deliverables for this Task with dynamic links that are functional in Visio and PDF format.
7. Valley Water will provide a consolidated listing of questions from its current operational review activities for use in the control algorithm figures as needed.
8. Valley Water will provide a single consolidated set of review comments at each review step.

SCHEDULE D SCOPE OF SERVICES

9. Valley Water will coordinate staff availability necessary for the completion of the tasks and meetings detailed above.
10. The workshop comments may include items not included in the current design specifications. Such items will be tracked separately from the minutes and action items list and may be considered for addition as a Supplemental Service with Valley Water approval.
11. For budgetary purposes, additional engineering design services may be scoped and paid for as Task 29 Supplemental Services.

Task 25 - Public Outreach Assistance

Consultant will provide support and assistance to Valley Water's public outreach activities. Such assistance may include coordination, preparation, and participation including, preparing presentation materials, attendance at meetings, preparation of graphics, developing responses to questions, and other tasks as directed by the VWPM.

- 25.1** Consultant will provide services as requested by the District to develop a public outreach strategy. This will include an initial meeting on strategy with District Public Affairs.
- 25.2** Consultant will develop up to 8 visuals - 8.5x11 pdf sheets (i.e., landscaping/gate renderings, truck traffic routing, construction sequencing and staging, architectural renderings) for District review and use in public meetings, public outreach, etc.
- 25.3** Consultant will submit Draft visuals for review and incorporate Valley Water comments into Final submissions.

Task 25 - Deliverables

1. Up to 8 Valley Water requested visuals in electronic pdf form. These shall be of high quality/high resolution capable of being enlarged for large format printing

Task 25 - Assumptions

1. For budgetary purposes, additional public outreach assistance may be scoped and paid for as Task 29 Supplemental Services.

Task 26 - Environmental Documentation Services

Consultant will review available environmental study documents supporting the 2015 Final Environmental Impact Report and Addendums No. 1 through 3 to identify gaps in information and recommend additional studies/reports that need to be conducted to support the environmental planning and permitting documents. Consultant will advise if a comprehensive Addendum or Subsequent Document is required to comply with CEQA regulations. If needed, Consultant will prepare required compliance documents/updates.

- 26.1** Consultant will review available environmental study documents supporting the 2015 Final Environmental Impact Report and Addendums No. 1 through 3.
- 26.2** Consultant will advise Valley Water on steps required, if any, to remain compliant with CEQA.

SCHEDULE D SCOPE OF SERVICES

- 26.3** Consultant's findings and approach will be reviewed by and approved by Valley Water Project team, including but not limited to Valley Water legal and environmental planners.
- 26.4** Consultant will prepare First Draft/Final Draft/Final Addendum or Subsequent Document if needed.
- 26.5** Consultant will incorporate Valley Water comments provided on Draft versions of documents prepared.

Task 26 - Deliverables

- 1. Draft/Final memo of findings regarding CEQA compliance and recommended next steps
- 2. First Draft/Final Draft/Final of Addendum or Subsequent Document if needed

Task 26 - Assumptions

- 1. Consultant will lead preparation of environmental permitting documents. Valley Water will lead public notification and comment activities, if any, with Consultant support. Valley Water will provide recommendations and review and comment on documents prepared by Consultant.
- 2. Consultant shall assume 1 comprehensive set of comments on the Draft memo of findings (deliverable 1 above) which will be incorporated into the final memo.
- 3. Consultant shall assume 1 comprehensive set of comments on the First Draft, and 1 comprehensive set of comments on the Final Draft which will be incorporated into the Final Addendum or Subsequent Document.
- 4. For budgetary purposes, additional environmental documentation services may be scoped and paid for as Task 29 Supplemental Services.

Task 27 - Engineering Services During Construction (ESDC) of the RWTP Interim Site Restoration Project

27.1 Submittals

- 27.1.1** Consultant will review for compliance with the Contract Documents the construction Contractor submittals forwarded by the Valley Water Construction Manager. Submittals will be forwarded electronically using the Valley Water construction document management system. The Valley Water Construction Manager will assign the submittal and re-submittal numbers for tracking purposes. Consultant will provide a written summary memo of comments for each submittal reviewed and post to the document management system. When comments marked up on submittals are required, these annotations will be returned in pdf format as a memo attachment.
- 27.1.2** Consultant shall review, respond, and return submittals within an average of 20 calendar days from receipt. Consultant must notify the Valley Water Construction Manager within 5 business days from receipt if a submittal cannot be reviewed due to incompleteness or cannot be reviewed within 20 days due to complexity or excessive size.
- 27.1.3** Each submittal reviewed will be returned with an action review classification as established within the document management system. Consultant will maintain an internal Log of submittals with receipt date, submittal name and number, return date, and review action.

SCHEDULE D SCOPE OF SERVICES

27.2 Request for Information (RFIs)

- 27.2.1 Consultant will review and provide responses to the construction Contractor's Requests for Information (RFIs) forwarded by the Valley Water Construction Manager. RFIs may pertain to clarification, additional information, unforeseen site conditions, construction errors, requested substitutions or proposed alternatives.
- 27.2.2 The Consultant shall provide written responses to RFIs within an average of five business days. Requested substitutions and proposed alternatives shall be responded to within an average of 7 business days after receipt of complete information.
- 27.2.3 RFI responses will not be used to issue changes to the requirements of the Contract Documents. RFIs related to the Contractor's construction means and methods will be returned with the response that the Contractor is responsible for means and methods.
- 27.2.4 Valley Water Construction Manager will assign RFI numbers for tracking purposes. Consultant will develop and use a standard response form and return responses using Valley Water's document management system.

27.3 Design Change Memoranda and Change Order Assistance

- 27.3.1 Consultant will prepare and issue design document changes to the Contract Documents as requested by the Valley Water Construction Manager to support the successful completion of the project. Design Change Memoranda (DCMs) may be needed to address unforeseen conditions, availability of new information, inconsistencies within the Contract Documents, and additional construction work desired by Valley Water.
- 27.3.2 DCMs will be issued through the document management system as Microsoft Word and pdf files. Any new drawings or specifications issued will be stamped and signed by an engineer or architect registered in the State of California.
- 27.3.3 The construction Contractor or Valley Water may initiate changes to the Project for a variety of reasons. Consultant will support the Valley Water Construction Manager in evaluating change orders when requested, including sketches, written narratives, construction cost opinions, and analysis of contractor-supplied information. The Valley Water Construction Manager will monitor and track change orders.

27.4 Engineering Site Support

- 27.4.1 The Consultant will attend periodic meetings with the Valley Water project team, Contractor, and others, and provide engineering observation and monitoring services during construction activities. This task will include periodic progress review visits to the site, participation in weekly progress meetings, and special topic review visits as requested by the VWPM or Valley Water Construction Manager.

27.5 Record Drawings

- 27.5.1 Consultant will prepare record drawings using markups to the design drawings provided by the Contractor and Valley Water Construction Manager. Consultant will conduct limited site survey work to verify key construction Contractor and Valley Water Owner Project As-Built drawings. Consultant Record Drawings will be submitted to the VWPM within 45 working days of the VWPM's issuance of a Project completion letter to the Contractor.

SCHEDULE D SCOPE OF SERVICES

Task 27 - Deliverables

1. Memoranda in pdf or Microsoft Word format providing Consultant's comments on submittals
2. Memoranda in pdf or Microsoft Word format providing Consultant's responses to RFIs
3. Design Change Memoranda in pdf and/or Microsoft Word format including drawing and specification markups and sketches as required
4. Change Order review comments in pdf or Microsoft Word format
5. Site visit observation reports
6. Record drawing files in pdf and CAD format

Task 27 - Assumptions

1. Valley Water will perform construction management and inspection services.
2. Valley Water Construction Manager team will perform the majority of Submittal and RFI review and response.
3. RWTP Interim Site Restoration Project construction will be completed during a six-month period between July 2021 and January 2022.
4. Valley Water will set up and maintain the EADOC document management system for construction of the RWTP Interim Site Restoration Project.
5. Preparation of Record Drawings does not include revisions to Specifications.
6. A total of 20 Submittals or resubmittals will be reviewed by Consultant. Review of submittals beyond this amount will be subject to authorization by the VWPM, with budget established for Task 29 Supplemental Services.
7. Consultant will not review Contractor formwork, temporary supports, or other construction means and methods plans, designs, or calculations.
8. A total of 12 RFIs will be responded to by Consultant. Response to RFIs beyond this amount will be subject to authorization by the VWPM, with budget established under Task 29 Supplemental Services.
9. A total of 2 DCMs will be prepared by Consultant. Additional DCMs beyond this amount will be subject to authorization by the VWPM, with budget established under Task 29 Supplemental Services.
10. An allowance has been identified for Change Order support. Additional support beyond this amount will be subject to authorization by the VWPM, with budget established under Task 29 Supplemental Services.
11. The allowance established for Consultant review and comment on Contractor change orders will be utilized as requested by Valley Water, including assistance with resolution of construction issues.
12. Consultant services do not include training, schedule review and analysis, or testing and startup.
13. Consultant continuous on-site presence is not required.
14. Consultant will provide up to two full-day site visits for periodic progress review.
15. Consultant participation in weekly construction progress meeting will be by phone. Each meeting and follow-up will total about two hours.
16. Consultant will provide up to two full-day site visits for as-requested special topic review.
17. Up to 28 record drawings will be prepared by Consultant from Contractor and Valley Water Construction Manager markups.
18. Consultant follow-up survey effort to check markups will be conducted on a prioritized list established with Valley Water and the Valley Water Construction Manager at the time. Survey checks will be limited to the extent of the list that can be accomplished within two full days on site.

SCHEDULE D SCOPE OF SERVICES

19. For budgetary purposes, additional engineering support may be scoped and paid for as Task 29 Supplemental Services.

Task 28 - Bid and Award Services for RWTP Reliability Improvement Project Phases 3 - 6

Consultant will assist during the bidding process of the Project, including:

28.1 Pre-bid Meeting and Site Walk

28.1.2 Consultant will attend the pre-bid conference, including a site visit, and assisting with preparation of documents to be distributed at the conference.

28.2 Respond to Bidder's Questions and Prepare Addenda

28.2.1 Consultant will respond to bidders' questions pertaining to the Bid Set within three business days of receipt of Valley Water's written request. Consultant will maintain a log of bidders' questions and responses, including whether any questions require preparing addenda to the Bid Set. Consultant will prepare bid document addenda if clarifications or changes to documents in the Bid Set are needed, which includes:

28.2.2 Changes to drawings will be shown on 8.5 x 11 sheets to the extent possible.

28.2.3 Changes to drawings will be signed and stamped and will be provided within five business days of the written request from Valley Water.

28.2.4 During preparation of each addendum, Consultant will evaluate any construction schedule and cost impact of the addendum and submit to Valley Water for consideration prior to finalizing addendum.

28.2.5 Respond to Bidder's Questions and Prepare Addenda for Repackaged Bid Set

28.2.6 Respond to Bidder's Questions and Prepare Addenda for future Aqua Ammonia Facility underground utilities

28.2.7 Respond to Bidder's Questions and Prepare Addenda for Plant Water System

28.3 Conformed Drawings

Consultant will prepare a Conformed Set of construction Contract Drawings after construction bids are received for use during construction.

28.4 Conformed Specifications

Consultant will prepare a Conformed Set of construction Contract Specifications after construction bids are received for use during construction.

Task 28 - Deliverables

1. Written responses to bidders' questions and associated log
2. Attendance at pre-bid conference, including site visit, and notes
3. Addenda to bid documents
4. Electronic versions of stamped and signed conformed set of Contract Documents
5. Conformed set of Contract Documents (electronic and hard copy) for use during Project construction

SCHEDULE D SCOPE OF SERVICES

Task 28 - Assumptions

1. Valley Water will print and distribute the bid sets to potential bidders
2. For budgetary purposes, additional engineering support may be scoped and paid for as Task 29 Supplemental Services.

Task 29 - Supplemental Services

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

29.1 Specific examples include the following:

29.1.1 Additional site investigations and field verification beyond those identified above.

29.1.2 Additional upgrades or revisions to: the original RIP design not identified in Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6; Task 21, Final Document Preparation for Repackaging of Design Set for Phases 3 - 6; or listed in Attachment Five - RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates.

29.1.3 Additional upgrades or additions to RWTP not identified in Task 22, Future Aqua Ammonia Facility, Task 23, Plant Water System Upgrade or in Attachment Five - RWTP Reliability Improvement Project Phases 3 - 6 Status Research and Design Updates.

29.2 Additional Services. Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Tasks 19 through 28 as Task 29 Supplemental Services, to include but not be limited to:

29.2.1 Additional meetings;

29.2.2 Additional time allotted for meetings or site visits;

29.2.3 Additional status/progress reports;

29.2.4 Additional phone conference calls;

29.2.5 Additional pages or copies of technical memoranda, plans, reports, drawings, and specifications; and

29.2.6 Additional public outreach visual materials.

7. Attachments

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

**SCHEDULE D
SCOPE OF SERVICES**

Attachment One to Schedule D - Fees and Payments
Attachment Two to Schedule D - Schedule of Completion
Attachment Three to Schedule D - Consultant's Key Staff and Subconsultants
Attachment Four to Schedule D - Reference Materials
Attachment Five to Schedule D - RWTP Reliability Improvement Project Phases 3 - 6 Status
Research and Design Updates

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**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

1. Total Authorized Funding

Total payment for Services performed, to the satisfaction of Valley Water, as described in the Revised Schedule(s) will not exceed a total amount of **\$35,405,987** (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 the 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 the Valley Water to the Consultant for Supplemental Services without prior written authorization by the Valley Water as stated in Schedule D, Scope of Services.

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**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

COST BREAKDOWN

Task	Description	Original Not-to- Exceed Fees	Amendment No. 4 Not-to- Exceed Fees	Amendment No. 5 Not-to- Exceed Fees	Revised Total Not-to- Exceed Fees
1	Project Management Services (COMPLETED)	\$757,959	-	(\$3,685.92)	\$754,273.08
2	Design Issue Resolution, Data Collection and Investigations (COMPLETED)	\$962,856	-	(\$372,843.40)	\$590,012.60
3	Prepare Basis of Design Report (COMPLETED)	\$714,685	-	(\$76,151.12)	\$638,533.88
4	Environmental Impact Report (COMPLETED)	\$228,620	-	\$43,152.86	\$271,772.86
5	Design Documentation Preparation (COMPLETED)	\$11,172,172	-	\$635,330.07	\$11,807,502.07
6	Construct-ability Review and Risk Management Strategy (COMPLETED)	\$236,629	-	(\$110,984.92)	\$125,644.08
7	Bid and Award Services (COMPLETED)	\$241,274	-	\$37,240.64	\$278,514.64
8	Public Outreach Assistance (COMPLETED)	\$105,805	-	(\$25,075.32)	\$80,729.68
9	Supplemental Services During Design (COMPLETED)	\$1,266,000	-	(\$199,478.89)	\$1,066,521.11
10	Project Management Services During Construction (UNCHANGED)	-	\$1,130,043	-	\$1,130,043.00
11	Submittal Review (UNCHANGED)	-	\$3,046,578	-	\$3,046,578.00
12	Requests for Information Responses (UNCHANGED)	-	\$2,921,703	(\$100,000.00)	\$2,821,703.00
13	Change Order Assistance (COMPLETED)	-	\$863,342	-	\$863,342.00
14	Schedule Review and Analysis (COMPLETED)	-	\$53,102	-	\$53,102.00
15	Engineering Site Support (COMPLETED)	-	\$3,880,116	-	\$3,880,116.00
16	Training Services (COMPLETED)	-	\$292,728	-	\$292,728.00

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

17	System Testing and Start-up Services (COMPLETED)	-	\$497,474	-	\$497,474.00
18	Supplemental Services During Construction (UNCHANGED)	-	\$914,792	\$172,496.00	\$1,087,288.00
Total NTE Fees (Tasks 1 to 18)		\$15,686,000	\$13,599,877	-	\$29,285,877.00

COST BREAKDOWN

Task	Description	Original Not-to-Exceed Fees	Amendment No. 4 Not-to-Exceed Fees	Amendment No. 5 Not-to-Exceed Fees	Revised Total Not-to-Exceed Fees
19	Project Management (New)	-	-	\$603,125	\$603,125
20	70 Percent Repackaging of Design Set for Phases 3-6 (New)	-	-	\$2,700,403	\$2,700,403
21	Final Document Preparation for Repackaging of Design Set for Phases 3-6 (New)	-	-	\$723,576	\$723,576
22	Future Aqua Ammonia Facility (New)	-	-	\$151,339	\$151,339
23	Plant Water System Upgrade (New)	-	-	\$336,158	\$336,158
24	Control Algorithms for Remaining Project Construction Phases (New)	-	-	\$604,423	\$604,423
25	Public Outreach Assistance (New)	-	-	\$50,899	\$50,899
26	Environmental Documentation Services (New)	-	-	\$25,491	\$25,491
27	ESDC of the RWTP Interim Site Restoration Project (New)	-	-	\$119,924	\$119,924
28	Bid and Award Services for RWTP Reliability Improvement Project Phases 3-6 (New)	-	-	\$248,398	\$248,398
29	Supplemental Services (New)	-	-	\$556,374	\$556,374
Total NTE Fees		-	-	\$6,120,110	\$6,120,110

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

(19 to 29)				
Total NTE Fees	\$15,686,000	\$13,599,877	\$6,120,110	\$35,405,987

NOTES:

1. Amendment No. 1, No. 2, and No. 3 were no - cost.
2. Amendment No. 4 added new Tasks 10 through 18.
3. As approved by the District, pursuant to a letter to Consultant dated January 15, 2020, unused fees from completed Tasks 1 – 9 (\$72,496) and from reduced Task 12 Requests for Information Responses (\$100,000) were both reallocated to Task 18 Supplementary Services (\$172,496), as documented in this Amendment No. 5.
4. Amendment No. 5 adds new Tasks 19 through 29.

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 2.5%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by Valley Water's Deputy Operating Officer.

B. Reimbursable Expenses

1. All reimbursable expenses not already covered in overhead may include, but are not limited to, mapping, rendering, printouts, leased equipment, mailing and delivery services, printing services, film and processing, plotting, and supplies. These other direct expenses as approved by Valley Water Project Manager (VWPM) will be billed on a monthly basis at actual cost linked to each Agreement Task, provided that the Task total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted.
2. Equipment purchased on behalf of Valley Water that costs \$50 or more must receive the prior written approval of Valley Water Project Manager (VWPM). All equipment purchased on behalf of Valley Water and paid for by Valley Water shall become the property of Valley Water and be delivered to Valley Water prior to expiration of this Agreement.
3. Travel expenses are reimbursed at actual costs. Travel and overnight accommodations, including per diem, required for performance of this Agreement will be paid at reasonable

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

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 (VWPM). For air travel, Valley Water will pay the cost of a coach class or equivalent ticket. Where air travel is required, Valley Water will pay the total cost of taxi, rideshare, public transportation, or a rental car, which may include insurance, gas, car fee, and taxes and will be paid at the actual costs incurred. Vehicle rental is limited to a compact or economy model, unless prior approval has been obtained from Valley Water Project Manager (VWPM) for a different type of vehicle.

4. Expenses incurred by the Consultant, including for Subconsultants, subcontractors and vendors, including lab services, will be reimbursed at actual cost plus 5%. Consultant shall provide invoices for all such services regardless of cost. The 5% markup will be applied only once, either by the Consultant or by its subconsultants, subcontractors, or vendors.
- C. For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant must obtain written approval from the Valley Water Project Manager (VWPM) as to the numbers of hours per task prior to that individual working on the Project. [NOT USED]

D. Prevailing Wage Requirements

The Scope of Services described in Task 20, 70 Percent Repackaging of Design Set for Phases 3 - 6 is considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See Standard Consultant Agreement, Section Four, Fees and Payments, subsection 3. Prevailing Wages.

1. In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water's Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

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**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Consultant: CDM Smith										
Principal-in- Charge/Project Manager	\$282.00	\$288.77	\$295.99	\$276.49	\$282.30	\$289.36	\$296.59	-	\$303.71	\$311.30
Lead Senior Engineer	\$234.00	\$239.62	\$245.64	\$250.77	\$256.04	\$262.44	\$269.00	-	\$275.46	\$282.34
Engineer Grade 8	\$208.00	\$212.99	\$218.32	\$222.90	\$227.58	\$233.27	\$239.10	-	\$244.84	\$250.96
Engineer Grade 7	\$204.00	\$208.91	\$214.12	\$218.62	\$223.21	\$228.79	\$234.51	-	\$240.14	\$246.14
Engineer Grade 6	\$195.00	\$199.68	\$204.67	\$208.97	\$213.36	\$218.69	\$224.16	-	\$229.54	\$235.28
Engineer Grade 5	\$162.00	\$165.89	\$170.04	\$173.61	\$177.26	\$181.69	\$186.23	-	\$190.70	\$195.47
Engineer Grade 4	\$153.00	\$156.67	\$160.59	\$163.96	\$167.40	\$171.59	\$175.87	-	\$180.10	\$184.60
Engineer Grade 3	\$136.00	\$139.26	\$142.75	\$145.75	\$148.81	\$152.53	\$156.34	-	\$160.10	\$164.10
Engineer Grades 2 and 1	\$126.00	\$129.02	\$132.25	\$135.03	\$137.87	\$141.32	\$144.85	-	\$148.33	\$152.03
CAD Designer	132.00	\$135.17	\$138.55	\$141.46	\$144.43	\$148.04	\$151.74	-	\$155.38	\$159.27
Technician Grade 4	-	\$102.40	\$104.96	\$107.16	\$109.41	\$112.15	\$114.95	-	\$117.71	\$120.65
Graphics	\$97.00	\$99.33	\$101.81	\$103.95	\$106.13	\$108.78	\$111.50	-	\$114.18	\$117.03
Contract and Project Administrator	\$120.00	\$122.88	\$125.95	\$128.59	\$131.29	\$134.57	\$137.94	-	\$141.25	\$144.78
Administrative	\$84.00	\$86.02	\$88.17	\$90.02	\$91.91	\$94.21	\$96.56	-	\$98.88	\$101.35
Chief Estimator 3	-	\$225.00	\$230.63	\$235.47	\$240.41	\$246.42	\$252.58	-	\$258.64	\$265.11
Chief Estimator 2	-	\$200.00	\$205.00	\$209.31	\$213.71	\$219.05	\$224.53	-	\$229.92	\$235.67
Chief Estimator 1	-	\$156.00	\$159.90	\$163.26	\$166.69	\$170.86	\$175.13	-	\$179.33	\$183.82

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Estimator Specialist	-	\$137.00	\$140.43	\$143.38	\$146.39	\$150.05	\$153.80	-	157.49	\$161.43
Estimator 2	-	\$130.00	\$133.25	\$136.05	\$138.91	\$142.38	\$145.94	-	149.44	\$153.18
Construction Specialist 1	-	\$85.00	\$87.13	\$88.96	\$90.83	\$93.10	\$95.43	-	\$97.72	\$100.16
Junior Estimator	-	\$65.00	\$66.63	\$90.02	\$91.91	\$94.21	\$96.56	-	98.88	\$101.35
V/SIO Drafter	-	-	-	-	-	-	-	\$66.00	\$67.58	\$69.27
SUBCONSULTANTS:										
Denise Duffy and Associates, Inc.										
Principal	-	-	-	-	-	-	-	-	-	\$226.31
Senior Environmental Scientist	-	-	-	-	-	-	-	-	-	\$147.93
Admin. Assistant	-	-	-	-	-	-	-	-	-	\$60.72
ENGEO (fka Geotechnical Consultants, Inc.)										
Principal	\$224.03	\$229.41	\$235.14	\$240.08	\$245.12	\$251.25	\$257.53	-	\$263.71	\$270.30
Senior Geologist 3	\$139.89	\$208.59	\$213.80	\$218.29	\$222.87	\$228.44	\$234.15	-	\$239.77	\$245.77
Senior Engineer 3	\$198.20	\$202.96	\$208.03	\$212.40	\$216.86	\$222.28	\$227.84	-	\$233.31	\$239.14
Senior Engineer 2	\$180.23	\$184.56	\$189.17	\$193.14	\$197.20	\$202.13	\$207.18	-	\$212.16	\$217.46
Senior Engineer 1	\$154.26	\$157.96	\$161.94	\$165.31	\$168.78	\$173.00	\$177.32	-	\$181.58	\$186.12
Senior Geologist 1	\$139.89	\$143.25	\$146.83	\$149.91	\$153.06	\$156.89	\$160.81	-	164.67	\$168.78
Project Engineer	\$120.20	\$123.08	\$126.16	\$128.81	\$131.52	\$134.81	\$138.18	-	\$141.49	\$145.03
Project Geologist	\$95.96	\$98.26	\$100.72	\$102.84	\$105.00	\$107.63	\$110.32	-	\$112.96	\$115.79
Coordinator	\$84.79	\$86.82	\$89.00	\$90.87	\$92.78	\$95.10	\$97.48	-	\$99.82	\$102.31
Project Assistant	\$55.72	\$57.06	\$58.48	\$59.71	\$60.96	\$62.48	\$64.05	-	\$65.58	\$67.22

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Hilts Consulting Group										
Principal	-	\$195.00	\$199.88	\$204.07	\$208.36	\$213.57	\$218.91	-	\$224.16	\$229.77
Senior Engineer	-	\$175.00	\$179.38	\$183.14	\$186.99	\$191.66	\$196.46	-	\$201.17	\$206.20
Project Draftsperson	-	\$110.00	\$112.75	\$115.12	\$117.54	\$120.48	\$123.49	-	\$126.45	\$129.62
Clerical	-	\$55.00	\$56.38	\$57.56	\$58.77	\$60.24	\$61.75	-	\$63.23	\$64.81
HKIT Architects										
Principal-in-Charge	\$165.38	\$169.35	\$173.58	\$177.23	\$180.95	\$185.47	\$190.11	-	\$194.67	\$199.54
Director of Design	\$137.83	\$141.14	\$144.67	\$147.71	\$150.81	\$154.58	\$158.44	-	\$162.25	\$166.30
Project Architect	\$131.81	\$134.97	\$138.35	\$141.26	\$144.23	\$147.84	\$151.53	-	\$155.17	\$159.05
Designer/CAD Operator	\$93.74	\$95.99	\$98.39	\$100.46	\$102.57	\$105.13	\$107.76	-	\$110.35	\$113.11
Administrative	\$80.50	\$82.43	\$84.49	\$86.26	\$88.07	\$90.27	\$92.53	-	\$94.75	\$97.12
Senior Project Designer	\$105.64	\$108.18	\$110.88	\$113.21	\$115.59	\$118.48	\$121.44	-	\$124.36	\$127.47
Admin. Assistant	\$80.07	\$82.43	\$84.49	\$86.26	\$88.07	\$90.27	\$92.53	-	\$94.75	\$97.12
Specifications Writer	\$169.74	\$173.81	\$178.16	\$181.90	\$185.72	\$190.36	\$195.12	-	\$199.81	\$204.80
Illingworth & Rodkin, Inc.										
Senior Consultant	\$141.09	\$144.48	\$148.09	\$151.20	\$154.38	\$158.24	\$162.20	-	\$166.09	\$170.24
Senior Consultant	\$149.47	\$153.06	\$156.88	\$160.17	\$163.53	\$167.92	\$171.81	-	\$175.93	\$180.33
Senior Consultant	\$168.96	\$173.02	\$177.34	\$181.06	\$184.86	\$189.48	\$194.22	-	\$198.88	\$203.85
Senior Consultant	\$178.60	\$182.89	\$187.46	\$191.40	\$195.42	\$200.31	\$205.31	-	\$210.24	\$215.50
Senior Consultant	\$217.47	\$222.69	\$228.26	\$233.05	\$237.94	\$243.89	\$249.99	-	\$255.99	\$262.39
Senior Consultant		\$139.96	\$143.46	\$146.47	\$149.55	\$153.29	\$157.12	-	\$160.89	\$164.91

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Staff Consultant	\$72.42	\$74.16	\$76.01	\$77.61	\$79.24	\$81.22	\$83.25	-	\$85.25	\$87.38
Staff Consultant	\$72.61	\$74.35	\$76.21	\$77.81	\$79.44	\$81.43	\$83.46	-	\$85.46	\$87.60
Staff Consultant	\$78.31	\$80.19	\$82.19	\$83.92	\$85.68	\$87.82	\$90.02	-	\$92.18	\$94.48
Staff Consultant	\$93.97	\$96.23	\$98.63	\$100.70	\$102.81	\$105.38	\$108.01	-	\$110.61	\$113.37
Financial Admin	\$130.91	\$134.05	\$137.40	\$140.29	\$143.24	\$146.82	\$150.49	-	\$154.10	\$157.96
Tech Support	\$40.71	\$41.69	\$42.73	\$43.63	\$44.55	\$45.66	\$46.81	-	\$47.93	\$49.13
Tech Support	\$70.46	\$72.15	\$73.95	\$75.50	\$77.09	\$79.02	\$80.99	-	\$82.94	\$85.01
Tech Support	\$95.00	\$97.28	\$99.71	\$101.80	\$103.94	\$106.54	\$109.20	-	\$111.82	\$114.62
Tech Support	-	\$53.32	\$54.65	\$55.80	\$56.97	\$58.39	\$59.85	-	\$61.29	\$62.82
JDH Corrosion Consultants, Inc.										
Project Manager	\$185.00	\$189.44	\$194.18	\$198.26	\$202.42	\$207.48	\$212.67	-	\$217.77	\$223.22
Asst. Project Manager	\$169.03	\$173.09	\$177.41	\$181.14	\$184.94	\$189.56	\$194.30	-	\$198.97	\$203.94
Project Engineer	\$90.13	\$92.29	\$94.60	\$96.59	\$98.62	\$101.09	\$103.61	-	\$106.10	\$108.75
Project Engineer	\$119.72	\$122.59	\$125.66	\$128.30	\$130.99	\$134.26	\$137.62	-	\$140.92	\$144.45
Project Engineer	\$131.85	\$135.01	\$138.39	\$141.30	\$144.27	\$147.88	\$151.57	-	\$155.21	\$159.09
Sr. Corrosion Tech.	\$119.72	\$103.42	\$125.66	\$128.30	\$130.99	\$134.26	\$137.62	-	\$140.92	\$144.45
Jr. Project Engineer	\$90.13	\$112.64	\$94.60	\$96.59	\$98.62	\$101.09	\$103.61	-	\$106.10	\$108.75
Corrosion Technician	\$101.00	\$103.42	\$106.01	\$108.24	\$110.51	\$113.27	\$116.10	-	\$118.89	\$121.86
Process Applications Inc.										
Engineer 1	\$202.65	\$207.51	\$212.70	\$217.17	\$221.73	\$227.27	\$232.00	-	\$238.55	\$244.51
Engineer 2	\$193.38	\$198.02	\$202.97	\$207.23	\$211.58	\$216.87	\$222.29	-	\$227.63	\$233.32
Computer Tech	\$87.75	\$89.86	\$92.10	\$94.03	\$96.00	\$98.40	\$100.86	-	\$103.28	\$105.86

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Siegrfried Engineering, Inc.										
Principal	\$229.16	\$234.66	\$240.53	\$245.58	\$250.74	\$257.01	\$263.43	-	\$269.76	\$276.50
Associate	\$206.66	\$211.62	\$216.91	\$221.47	\$226.12	\$231.77	\$237.57	-	\$243.27	\$249.35
Senior Engineer	\$110.06	\$112.70	\$115.52	\$117.95	\$120.43	\$123.44	\$126.53	-	\$129.56	\$132.80
Landscape Architect	\$120.29	\$123.18	\$126.26	\$128.91	\$131.62	\$134.91	\$138.28	-	\$141.60	\$145.14
Senior Tech	\$103.81	\$106.30	\$108.96	\$111.25	\$113.59	\$116.43	\$119.34	-	\$122.20	\$125.26
Clerical	\$75.14	\$76.94	\$78.87	\$80.53	\$82.22	\$84.28	\$86.38	-	\$88.46	\$90.67
Subtronic Corporation										
Supervisor / Project Manager	-	-	-	-	-	-	-	-	-	\$175.00
Administration / Accounting	-	-	-	-	-	-	-	-	-	\$100.00
TJC and Associates, Inc.										
Engineer Level 10	\$213.00	\$218.11	\$223.56	\$228.25	\$233.04	\$238.67	\$244.84	-	\$250.71	\$256.98
Engineer Level 9 (E9)	-	\$201.06	\$206.09	\$210.42	\$214.84	\$220.21	\$225.72	-	\$231.13	\$236.91
Engineer Level 8 (E8)	-	-	-	\$201.49	\$205.72	\$210.86	\$216.13	-	\$221.32	\$226.85
Engineer Level 7 (E7)	\$179.70	\$184.01	\$188.61	\$192.57	\$196.61	\$201.53	\$206.56	-	\$211.52	\$216.81
Engineer Level 6 (E6)	\$177.80	\$182.07	\$186.62	\$190.54	\$194.54	\$199.40	\$204.39	-	\$209.29	\$214.53
Engineer Level 5 (E5)	\$147.20	\$150.73	\$154.50	\$157.74	\$161.05	\$165.08	\$169.20	-	\$173.26	\$177.60
Engineer Level 4 (E4)	\$136.60	\$139.88	\$143.38	\$146.39	\$149.46	\$153.20	\$157.03	-	\$160.80	\$164.81
Engineer Level 3 (E3)	\$119.20	\$122.06	\$125.11	\$135.60	\$138.45	\$141.91	\$145.46	-	\$148.95	\$152.67
Engineer Level 2 (E2)	-	\$119.25	\$119.07	\$124.80	\$127.42	\$130.61	\$133.87	-	137.08	\$140.51

**SCHEDULE D
ATTACHMENT ONE
FEES AND PAYMENTS**

Classification/ Staff	Hourly Rate Original Agreement 1/22/13 thru 1/21/14	Hourly Rate 1/22/14 thru 1/21/15	Hourly Rate 1/22/15 thru 1/21/16	Hourly Rate 1/22/16 thru 1/21/17	Hourly Rate 1/22/17 thru 1/21/18	Hourly Rate 1/22/18 thru 1/21/19	Hourly Rate 1/22/19 thru 1/21/20	Hourly Rate 7/1/19 thru 1/21/20	Hourly Rate 1/22/20 thru 1/21/21	Hourly Rate 1/22/21 thru 1/21/22
Engineer Level 1 (E1)	\$101.90	-	-	\$109.20	\$111.49	\$114.28	\$117.13	-	\$119.95	\$122.94
Drafting Level 6 (C6)	-	-	-	\$112.82	\$115.19	\$118.07	\$121.02	-	\$123.93	\$127.02
Drafting Level 5 (C5)	-	\$96.87	\$99.29	\$101.38	\$103.51	\$106.10	\$108.75	-	\$111.36	\$114.14
Drafting Level 4 (C4)	-	-	-	\$92.91	\$94.86	\$97.23	\$99.66	-	\$102.05	\$104.61
Drafting Level 3 (C3)	-	\$80.69	\$82.71	\$84.45	\$86.22	\$88.38	\$90.58	-	\$92.76	\$95.08
Drafting Level 2 (C2)	-	\$79.05	\$81.03	\$82.73	\$84.47	\$86.58	\$88.75	-	\$90.88	\$93.15
Administrative Level 7 (A7)	-	-	-	\$88.13	\$89.98	\$92.23	\$94.54	-	\$96.80	\$99.22
Administrative Level 6 (A6)	\$69.00	\$70.66	\$72.42	\$73.94	\$75.49	\$77.38	\$79.31	-	\$81.22	\$83.25
Administrative Level 5 (A5)	-	-	-	\$61.62	\$62.91	\$64.98	\$66.09	-	\$67.68	\$69.37
Administrative Level 4 (A4)	-	\$47.10	\$48.28	\$49.29	\$50.33	\$51.59	\$52.88	-	\$54.15	\$55.50

NOTE:

1. Increased hourly rates for Consultant and Subconsultants were approved administratively as documented in letters from the District to Consultant dated March 15, 2018, and November 16, 2020, and have been incorporated in Amendment No. 1, Amendment No. 2, Amendment No. 4, and Amendment No. 5.

**SCHEDULE D
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 **October 31, 2023**, 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.

PROJECT SCHEDULE

Task	Description	Duration From Notice to Proceed (months)
1	Project Management Services (COMPLETED)	COMPLETED
2	Design Issue Resolution, Data Collection and Investigations (COMPLETED)	COMPLETED
3	Prepare Basis of Design Report (COMPLETED)	COMPLETED
4	Environmental Impact Report (COMPLETED)	COMPLETED
5	Design Documentation Preparation (COMPLETED)	COMPLETED
6	Construct-ability Review and Risk Management Strategy (COMPLETED)	COMPLETED
7	Bid and Award Services (COMPLETED)	COMPLETED
8	Public Outreach Assistance (COMPLETED)	COMPLETED
9	Supplemental Services During Design (COMPLETED)	COMPLETED
10	Project Management Services During Construction (UNCHANGED)	7 (Duration from Effective Date of Amendment No. 5)
11	Submittal Review (UNCHANGED)	7 (Duration from Effective Date of Amendment No. 5)
12	Requests for Information Responses (UNCHANGED)	7 (Duration from Effective Date of Amendment No. 5)
13	Change Order Assistance (COMPLETED)	COMPLETED
14	Schedule Review and Analysis (COMPLETED)	COMPLETED
15	Engineering Site Support (COMPLETED)	COMPLETED
16	Training Services (COMPLETED)	COMPLETED
17	System Testing and Start-up Services (COMPLETED)	COMPLETED
18	Supplemental Services (UNCHANGED)	Term of Agreement
Amendment No. 5 - New Tasks 19 through 29		Duration from Effective Date of Amendment No. 5
19	Project Management (NEW)	Term of Agreement
20	70 Percent Repackaging of Design Set for Phases 3 - 6 (NEW)	7
21	Final Document Preparation for Repackaging of Design Set for Phases 3 - 6 (Bid Set) (NEW)	10

**SCHEDULE D
ATTACHMENT TWO
SCHEDULE OF COMPLETION**

22	Future Aqua Ammonia Facility (NEW)	12
23	Plant Water System Upgrade (NEW)	12
24	Control Algorithms for Remaining Project Construction Phases (NEW)	13
25	Public Outreach Assistance (NEW)	16
26	Environmental Documentation Services (NEW)	12
27	ESDC of the RWTP Interim Site Restoration Project (NEW)	16
28	Bid and Award Services for RWTP Reliability Improvement Project Phases 3 - 6 (NEW)	16
29	Supplemental Services (NEW)	Term of Agreement

NOTES:

1. Amendment No. 1 extended the term to August 15, 2015.
2. Amendment No. 2 added new Tasks 10 through 18 and extended the term to September 30, 2017.
3. Amendment No. 3 did not revise the term of the Agreement.
4. Amendment No. 4 extended the term to September 30, 2021.
5. Amendment No. 5 adds new Tasks 19 through 29 and extends the term to October 31, 2023.

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**SCHEDULE D
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
Servando Molina	CDM Smith	Principal-in-Charge	2300 Clayton Road, Suite 950 Concord, CA 94520 (925) 296-8024 molinas@cdmsmith.com
Greg Lindstadt	CDM Smith	Project Manager	14432SE Eastgate Way, Suite 100 Bellevue, WA 98007-6493 (425) 519-8327 lindstadtgl@cdmsmith.com

2. The following Subconsultants are authorized to perform Services for this Project:

Firm	Project Role	Contact Information
Denise Duffy & Associates	CEQA Support	947 Cass Street, Suite #5 Monterey, CA 93940 (831) 373-4341 Leianne Humble lhumble@ddaplanning.com
Engco (formerly Geotechnical Consultants, Inc.)	Geotechnical Engineering	500 Sansome St., Suite 402 San Francisco, CA 94111 (415) 981-9950 Neel Neelakantan Neel@gtcgeotech.com
HKIT Architects	Architecture	538 Ninth St, Suite 240 Oakland, CA 94607 (510) 625-9800 Christophe Laverne claverne@hkit.com
JDH Corrosion	Corrosion	1100 Willow Pass Court Concord, CA 94520 (925) 927-6630 J. Darby Howard dhoward@jdhcorrosion.com
Siegfried Engineering, Inc.	Landscape Architecture	111 North Market Street, Ste. 300 San Jose, CA 95113 (408) 754-0121 Paul Schneider pis@siegfriedeng.com
Subtronic Corporation	Potholing	5031 Blum Rd., #2 Martinez, CA 94553 (925) 228-8771 subtronic@subtronic.com

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

Firm	Project Role	Contact Information
TJC and Associates	Lead Structural Engineer	2356 Gold Meadow Way, Suite 250 Gold River, CA 95670-6329 Terence Cavanagh (916) 853-9658 (Ext. 104) terry@tjcaa.com
TJC and Associates	Lead Electrical Engineer	1330 Broadway, Suite 1101 Oakland, CA 94612-2503 Paul Giorsetto (510) 251-8980 Paul@tjcaa.com
TJC and Associates	Instrumentation Lead	2890 North Main Street, Suite 303 Walnut Creek, CA 94597-2738 Mike Erwin (925) 357-2676 michael@tjcaa.com

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**SCHEDULE D
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref No.	Description
1	Santa Clara Valley Water District (Valley Water) Non-Disclosure Agreement (NDA) and Personal Non-Disclosure Agreement (PNDA) (FC 1650 or FC 1882)
2	Santa Clara Valley Water District (Valley Water) Standards for GIS Products April 2021 version: http://gis.valleywater.org/Download/GIS_PRODUCT_STANDARDS.pdf
3	CADD Standards Manual Version 2.0/January 2011 and AutoCAD 2018 version
4	Files Provided via Valley Water FTP Site: https://fta.valleywater.org/fl/aOUbsBwKzA 4.1 Rinconada Reliability Improvement Project CM As-Built PDF file 4.2 Rinconada Reliability Improvement Project BBII As-Built PDF file 4.3 Master List Future Equipment 03-29-2021 rev 10.xlsx
5	EADocs - Rinconada Reliability Upgrades - All Available Project Documents https://scvwd.eadocsoftware.com/index.htm
6	All Deliverables prepared by Consultant and submitted to Valley Water as required by Tasks 1 - 19

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**SCHEDULE D
ATTACHMENT FIVE
RWTP RELIABILITY IMPROVEMENT PROJECT PHASES 3 - 6
STATUS RESEARCH AND DESIGN UPDATES**

A. Items to be Assessed and Confirmed with VW pursuant to Task 20.8 Revise Drawings and Specifications for Phase 2 DCMs

1. Determine if VW prefers permanent load bank for Gen2
2. The Upper and Lower More Ave. Guardhouses have been the subject of over 20 RFIs to define the work to be completed in Phase 2.
 - a) Related PCO 519 - Upper More Guardhouse Relocation
 - b) Related DCM 177/CDC 184 - Revised Work for Town of Los Gatos Encroachment Permit (also related to Memo's 1097 and 1623)
 - c) Testing and Startup of Guardhouses is not yet complete: Submittal 01756-12, -12.1, -12.2 (Status MCN) (to be verified by CM).
 - d) New site lighting fixtures are not installed under Phase 2 work. Existing conduits and circuits to existing lighting are to be retained, maintained, and protected (CM to verify compliance).
3. DCM 24/CDC 21 - Backwash Air Pipe Rerouting
4. DCM 27/CDC 24 - Chlorine Contact Basin Sample Pump Tags
5. DCM 39, DCM 124: Incorporate the requirement for 24V only inside control panels and 24VDC powered instruments.
6. DCM 59/CDC 52 - Fluoride Metering Pump Change
7. DCM 60/CDC 53 - Sodium Hypochlorite Facility: Trench Grating
8. DCM 102/CDC 89 - Power for Overhead Doors 700B, 28A and 28B in Control Building.
9. DCM 106/CDC 95 - Chemical-Resistant Concrete Coating at Chlorine Contact Basin
10. DCM 108 required addition of two 8" combination air/vacuum relief valves to the 48" / 54" WW/OF Pipeline. To date only the downstream AVR/V valve has been installed; upstream valve not installed (outlet for upstream valve installed, but AVR/V not installed). AVR/V at sta. 1+03.5 is not installed. See RFI 995. Memo 429. PCO 126. DCO 51. Only downstream AVR/V valve installed; upstream valve not installed. Feedback from inspectors is that only outlet for upstream valve installed, but AVR/V not installed.
11. DCM 111/CDC 100 - Removal of OCL and FSA Pump Disconnects
12. DCM 139/CDC 129 - Modify the Gate Pocket Details for two slide gates at the Chlorine Contact Basin
13. DCM 157 - Chemical Residual Controls
14. DCM 164 - Revisions to Chlorine and Chloramine CT Compliance Calculations. Need to add for Loops beyond Loop OCL_520 for Phase 4 facilities.
15. DCM 166 - Clarification of Chemical Flow Pacing
16. DCM 167 - Clarification Section 01756 Testing Plan Contents. Consider similar updates to Section 01756 for future project.

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17. DCM 170: Establish the requirements for the maintenance network and segregate network drops between control networks and maintenance network to intelligent equipment.
18. All intelligent distribution equipment (ASDs, Switchgear, Protective Relays, MCCs) should have internal firmware updated to current versions.
19. DCM 173 - Sight Glasses for Liquid Alum and PAC Service. Consider if sight glasses desired for other post Phase 2 chemical system improvements.
20. DCM 178/CDC 190 - Chemical Feed Pump Flow Switch (FSH) Deletions (completed only for the Phase 2 areas); In addition, sight glasses will be added in lieu of the flow switches per CDC #182.
21. DCM179, which upgrades all of the plant processors to M580s and all of the Phase 4 I/O panels to X80 Series I/O.
22. DCM 187/CDC 200 - Ozone Residual Analyzer Replacement (Piping partially completed - update drawings to reflect. Check Cordoba equipment list to see if analyzers were procured and furnished as future phase equipment).
23. DCM 189/CDC 202 issued for VW RW telemetry cable re-route and BL-1 refeed. Work needs to be done before clarifier demo. BBII did not complete this work. Should extend Phase 3 duration to complete this work prior to clarifier demolition.
24. DCM 207/CDC 228 - Modifications to Ozone Safety Systems (only partially completed, just Phase 2 areas however not yet completed as of August 2020. Also, ventilation system Phase 2 requirement functionality not completed.
25. DCM 219/CDC 241 - Deletion of Chemical Metering Pump Calibration Column Vent Line Isolation Valve (completed only for the Phase 2 areas)
26. DCM 231 (only partially completed): Additional monitoring of standby power system status: both new units (EGEN-2), and old unit (EGEN-1) that has very little status monitoring.
27. DCM 232 - Analyzer Sample Piping Modifications. Consider similar modifications for future phase work as applicable.
28. NCN 194. Remaining issue of wiring of the system to the SCADA was included in DCM 231/CDC 253 which has been voided on VW instructions, so that work remains unfinished.
29. NCN 197: PowerCon performed some work under NCN #197; per VW, the individual relay failure issue will be addressed in a later phase, and the NCN was closed with that work outstanding.
30. Memo 1395 - West Clear Well Modifications and Shutdowns
31. Memo 1436 - Temporary Alternate Chemical Unloading Facility. Build it into the design drawings and specs as the way to deal with the need to close the breezeway access road to construct filters. Will require O&M input to design, unless Consultant can suggest a construction sequencing and methods approach that all agree will keep the road open.

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- 32. Memo 1452 - 4H and 4I Shutdowns - Filters Backwashed and Skimmed Prerequisite
- 33. Memo 1486 - Request Response to BBII's Request for Phase 3, 4, 5, & 6 Schedule - New Filter Backwash Requirements
- 34. Memo 1487 - Request Response to BBII's Request for Phase 3, 4, 5, & 6 Schedule - Defer Work for Shutdown 3D to Later Phases
- 35. RFI 745 - NSF Testing Compliance for Plastic Bar Supports. Consider specifying only stainless steel bar supports for all structures.
- 36. RFI 946 - Double Containment Piping - Limits of clear pipe/fittings. Update specification to require clear containment piping in all but encased duct banks.
- 37. RFI 1248 (and related DCMs): Explicitly include line reactors for stand-alone (Division 11) chem metering pump drive specs
- 38. RFI 1350 and 1350.1 - Additional shut-downs not shown on Table 01140-1.03B
- 39. RFI 1355: Auto Restart Chemical Feed Systems, and related consideration for UPS Power to chemical feed pumps. Based on Phase 2 improvements, consider if there are desired revisions for future phase work. Relates to auto-restart after power outage, need for UPS power and control schematics.
- 40. RFI 1569/Memo 1337 - Shutdown 3A Potential Workarounds
- 41. RFI 1590/Memo 1377 - Shutdowns in 80 mgd Period
- 42. RFI 1631 - Shutdowns 4J, 4K, 5A, 5D calendar adjusted from 80 mgd to 40 mgd (or no restrictions - final disposition depends on results of high flow clearwell test results)
- 43. RFI 1641 - Shutdown 5X - Capping of Temp 30 in Wash Water Lines
- 44. RFI 1643 - Timing Restriction on Shutdown 4G - Settled Water to New Filter Connection
- 45. Deficiency 162: Clarify definition of Estop functionality with VW and update specifications.
- 46. Shutdowns for PLC integration. Review future work and consider conservatively specifying additional shutdowns on Section 01140 in light of work through Phase 2 and considering VW SCADA Group and Operations Group expectations.
- 47. Chemical pump diaphragm rupture sensor. For future work, consider if it is desired to add a relay and indicator on local panel, and SCADA indication (if feasible).
- 48. Valley Water's ongoing Residuals project is planning on removing the existing north washwater recovery basin. The RIP design required the existing basins to remain in service until completion of Phase 4 to provide more washwater handling capacity and operational flexibility during startup and testing of the new filter complex. Timing and operational impact of basin demolition to be reviewed with Valley Water and determine if design (and LOE and schedule) will need to be revised to account for this.

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B. Items to be Assessed and Confirmed with VW pursuant to Task 20.9 Revise Drawings and Specifications for Owner-furnished items

1. Situation with MCCs going in under Phases 3 -5 (Includes MCCs in Admin Building and 50 series MCCs that might have been purchased and kept in storage).

C. Items Planned to be Updated pursuant to Task 20.3 Revise Drawings and 20.4 Revise and Expand P&IDs

1. During testing of MSG, existing 480V breaker for EGEN-1 was determined to be problematic. Staff may want to replace with new.
2. Tie in sump pump discharge lines from LDVs and Pull boxes and routing to the Phase 6 waste containment tanks/area.
3. Will specify that the Contractor perform a complete condition assessment of the electrical infrastructure associated with Phase 3 and 6.
 - a) Feeders and protective devices to Unit Sub 5
 - b) Unit Sub 5A and 5B that will have been sitting unloaded for several years
 - c) EGEN-2 will have been run lightly loaded for several years if VW has not brought in a load bank or exercised under full plant load.
4. Network separation for MVSWGR-1 A and B side equipment
5. Additional status monitoring of standby power systems and 12 kV distribution equipment
6. Update protective settings and run current arc flash study: (Req'd by Code every 5 years). By the time the new project or completion phase starts, the arc flash results done through Phase 2 will need to be updated and a study rerun: the base standard for calculations IEEE 1584 went through significant revisions in the 2018 and updates to the AF results are required every 5 years.
7. Update control schematics to resolve VFD Local LOS issue and LOTO policies
8. Coordinate electrical infrastructure with I&C List: Control schematics, networks, equipment upgrades
9. Update Fire alarm, CCTV, access security with current technologies
10. Update specs and drawings for eliminating ALL 120VAC in control panels.
11. Update electrical schematic to show interposing relays with 24VDC coils in starters circuits instead of dry contact outputs from the I/O panels.
12. Revise specifications to M580 processors and X80 series I/O.
13. Update existing I/O lists per TSI's final versions.
14. Existing control building (PLC700) RIO Panels (LCPs) are inconsistent, piecemealed together over 25 years with poorly documented modifications, and components are obsolete/no longer supported (and possible unavailable). Hardware updates would have been the next logical improvement project after Phase 6 under

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the original schedule. With the extended construction duration to date and new potential Phase 6 completion, replacement will be overdue. Upgrades to be added and completed in conjunction with Phase 3 of the resumed project. May require an additional shutdown; to be addressed.

15. Eliminate all references to VW's PLC Programming Guidelines and HMI Development Guidelines. These documents have never been updated and the programming methods evolved significantly during development and commissioning.
16. Add requirements that the PCSI use the programming methods developed during Phase 2, and add to those methods as required for 4 & 5. This includes established DFBs, DDTs, tag naming, PLC to PLC communications, PLC program structure and organization, iFix database structures, graphic standards, etc.
17. Add Win-911 requirements to the specification.
18. Provide more detailed Historian requirements. Need to determine current tag count of the Enterprise historian and estimate the number of tags to be added so the PCSI can determine licensing requirements.
19. Revise network drawings to show rack mounted network switches instead of panel mounted network switches.
20. Update network spec to include current VW standards for networks and switches.
21. Update server rack power supplies in the Ozone Building to current VW standards.
22. Update network drawings to include all of the field changes that were made by VW IT and 545 at the end of Phase 2.
23. Update network drawings to show connections and details for all of the workstations and network jacks that were added during Phase 2.
24. Version of the Schneider Electric STRUXWARE software used for power meter monitoring is out of date; may no longer be supported when the repackage project bids / builds. Update.
25. Update valve actuator specs to match VW requirements and align with Div 13 requirements.
26. The handrail/guardrail atop the Phase 2 basins was the subject of many deficiencies and RFIs addressing gap closures, finishes, and kick plate installation and coordination issues with adjacent conduit. To resolve, will require more inter-discipline coordination by Contractor and require Contractor to prepare conduit and handrail coordination drawings to be submitted to the CM for review prior to installation.
27. Pipe painting color coding. This was the subject of several rounds with the O&M staff during Phase 2 that resulted in a number of revisions to the pipe painting color schedule in the specifications. Reference final decisions in submittal response, so that future work when performed is consistent and doesn't mistakenly impose the original specs.

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28. Pressure gauges and switches and coriolis chemical meters. Update specifications for chemical compatibility. Currently 316 stainless specified, but not compatible with all chemicals. Revised via submittal responses.
29. Division 3: review concrete finishing requirements and bug hole requirements in light of BBII RFIs, to clarify compliance criteria.
30. Section 09962: Add sentence that grout pads for pumps, equipment, pipe supports, etc. be coated.
31. Section 15050: add requirement for contractor to prepare and submit piping shop drawings for work shown on the mechanical drawings.
32. RFI 1385: Floc sed - chemical piping. For future phase work (e.g. Chlorine Contact Basin), require Contractor to prepare and submit shop drawings showing piping layout.
33. RFI 1387 - Training Plans by Phase. Look at future phases, number of training sessions, and consider revising specifications which suggest training be completed after the FAT whenever possible. This would avoid Contractor requesting time extensions for poor planning.
34. Steel and ductile iron piping. Require contractor to include in their initial piping shop drawing submittals their plan for hydrostatic testing of pipelines. This is to help avoid poorly planned hydrotesting.
35. RFI 1388: 84" OW-SCCP-Leaking Flanged Connections. Through shop drawing review or other means such as specifications, suggest use of more butt straps or flex couplings for alignment adjustments. This could help avoid contractor piping installation alignment issue that took weeks to resolve.
36. RFI 1446: NACE III Requirements for Coating Specification 09910 & 09962. Update Section 09962 to require spark testing by the Contractor for chemical resistant coatings.
37. RFI 1456: OCL - Additional PRVs Required. For Chlorine Contract Basin, add drain line to collect PRV discharge and route to collection location. Add leak sensor for line.
38. Phase 3, 4 and 5 work durations. Review durations in light of new Contractor executing the work. Additional time may be required for submittals and for outstanding work not completed through Phase 2. Also will be learning curve for new Contractor.
39. Chemical system related items:
 - a) Update documents for hose installation for future phases
 - b) Update LDV at WWRF to include hose loop with vault leak detection.
 - c) Update area 11 to include expansion loop or other for hose.
 - d) Chlorine contact basin - evaluate chemical pipe transition approach from hose to pipe on basin.

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- e) Add hose at suction and discharge of Centrac B pumps.
 - f) Check hose specs against submitted products and update spec as required.
 - g) Revise Chlorine and Chloramine CT Compliance Calculations Loops OCL_530 through OCL_550 (similar to revisions in DCM 164/CDC 167 through Loop 520).
 - h) Add sight glasses to Phase 4 and 5 metering pumps. (note that these were not covered in CDC 182).
40. Contractor's QA/QC Plan:
- a) Itemize more explicit definition of Construction work quality control responsibilities
 - b) Review and provide suggested edits to QA/QC inspection language in front end documents.
 - c) Review and add language for hold points for inspection. Language that could be considered based on discussions with the prior CM team is as follows: "The Contractor will inspect the work and certify in writing that it is in conformance with the Contract requirements. After the certification is received, the Construction Manager will schedule an inspection to verify - a minimum 24-hour notice will be provided for this inspection."
 - d) Add requirement for in-progress surveying by contractor on pipelines, etc. to be reviewed by the CM to verify compliance prior to backfilling/encasement/placing concrete etc.
 - e) Consider adding the following inspection requirement to Section 09962: "Spark testing of the chemical resistant coatings will be completed by the Contractor and witnessed by the Construction Manager and the Fire Marwill."
41. Itemize Fire Marshal expectations identified during Phase 2. Add language potentially similar to the following: "The following tests will be completed for the construction manager (CM Test) with a second test for the Fire Marwill (FM Test): hydrostatic testing of the chemical carrier piping; air testing of the chemical containment piping; visual inspection and spark testing of the chemical resistant coatings; and lake testing of the chemical resistant coatings. After the CM Test is passed, coordinate with Valley Water who will coordinate to schedule the FM Test - a minimum 3 day notice will be required for the FM Test."
42. ORT/FAT/Start-up test planning and documenting. Add language potentially similar to the following to Section 01756: "The Contractor is responsible for preparing a 30-day startup and testing plan." Also, potentially review and update Section 01756 and Paragraph 1.03.B.1 as shown below.
- a. "Individual testing plans for each major new facility, each modified existing process system, and each temporary system will be submitted. Testing plans will describe all planned work leading to the startup and 30-day acceptance test of each new system. Functional Testing of systems and controls included on the P&IDs is but one small part of the overall testing plan. As a minimum, the test plan will include those items included in the testing plan outline herein. Testing plans will conform to all of the work restrictions identified in

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the Standard and Special Provisions, Section 01140, this Section, and other Sections. Per 1.04.A below, the objective of this Section is for the Contractor to combine required testing elements into a thorough, cohesive and comprehensive testing plan organized and submitted under Section 01756 cover. The test plan will include all testing specified in Section 01756 as well as including chapters or sections for testing specified under other Sections (e.g. Sections 13410, 13490, and 16960, Division 11, Division 15, etc.). The test plan will be suitably organized into sections and subsections as appropriate for the testing required at each process facility. Include all startup and testing forms, checkoffs, etc. to be used during startup and testing in the test plan."

43. Monthly construction schedule update requirements:
 - a) Clarify that a monthly update to the overall construction project schedule is required.
 - b) Other lessons learned from the DRB process.
44. Revisit DCM 215 and 236 as secondary containment for diesel fuel collects rainwater; re-design/modification may be necessary.
45. Install handrail around top of area 13 diesel tank (maintenance and safety unit request).

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