

STANDARD CONSULTANT AGREEMENT

C0323 (08-03-09)

THIS AGREEMENT "Agreement" is entered into on August 27, 2013, by and between SANTA CLARA VALLEY WATER DISTRICT, ("District"), and GEI CONSULTANTS, INC., ("Consultant").

WHEREAS District desires certain services hereinafter described and Consultant is capable of providing and desires to provide such services,

NOW, THEREFORE, District and Consultant for the consideration and upon the terms and conditions specified agree as follows:

SECTION I

SCOPE OF SERVICES

The services to be performed under this Agreement are as described in Appendix One attached hereto and incorporated herein by this reference.

SECTION II

DUTIES OF CONSULTANT

1. All work performed by Consultant or under its direction must be sufficient to meet the purposes specified in this Agreement, and must be rendered in accordance with the accepted practices and standards of Consultant's profession.
2. Consultant must stay informed of and observe any and all statutes, laws, ordinances, and regulations pertaining to Consultant's contractual performance. To the extent that any copyrighted materials are used or reproduced for use in such performance, Consultant must secure, at its sole cost and expense, any and all necessary permission to utilize or reproduce such materials in the manner proposed or suggested by the scope of services.
3. Consultant must not undertake any work beyond the scope of this Agreement unless such additional work is approved in advance in writing by District. The cost of such additional work will be reimbursed to Consultant by District on the same basis as provided in Section IV unless otherwise specified.
4. If in the performance of the services hereunder, it is necessary to conduct investigations or other operations in the field, security and safety of the area of such field operations under the control of the Consultant will be the responsibility of Consultant.
5. Where services hereunder include preparation of drawings and other contract documents by Consultant and where, notwithstanding acceptance and approval by District thereof, in the opinion of the District, drawings and other contract documents so prepared are found during the course of construction to require modification due to the

oversight, inadvertence or negligent omissions of, errors by, or lack of detail provided by Consultant, such modifications must be made by Consultant without additional compensation. Where such contract documents are used in letting a contract for construction, Consultant will assume responsibility for any direct or actual damages suffered or incurred by the District, including, but not limited to, any increase in compensation due to a construction contractor, which increase is directly attributable to the required changes in the Drawings or other contract documents to the extent caused by Consultant's negligent acts, omissions, or errors.

6. Consultant is required, at District's request, to meet with District staff regarding performance of the Scope of Services.
7. In accordance with the provisions of Section 3700 of the California Labor Code, Consultant is required to secure Workers' Compensation insurance for its employees. Consultant must obtain and keep in full force and effect Workers' Compensation insurance necessary in connection with the performance of this Agreement to protect Consultant and its employees under the Workers' Compensation Insurance and Safety Act, including coverage under United States Longshoremen's and Harbor Worker Act, when applicable. Such insurance must be in a standard form and relieve the District of all responsibility therefore. Consultant must, prior to undertaking the work contemplated herein, supply District with a certificate of insurance evidencing that said requirements are fully in effect.
8. The Santa Clara Valley Water District is an equal opportunity employer and requires its contractors to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Contract, the Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any sub-consultant, employee, or applicant for employment, in the recruitment, selection for training including apprenticeship, hiring, employment, utilization, promotion, layoff rates of pay, or other forms of compensation, or against any other person, on the basis of race, color, religion, ancestry, gender, national origin, age (over 40), marital status, medical condition (including cancer), pregnancy, parental status, the exercise of family care leave rights, political affiliation, sexual orientation, gender identity, special disabled veteran status, Vietnam Era veteran and all other Veteran status, or because of a physical or mental disability (including HIV and AIDS). 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 American's with Disabilities Act of 1990; the Rehabilitation Act of 1973 (sections 503 and 504); California Fair Employment and Housing Act (Government Code section 12900 et. Seq.); California Labor Code sections 1101 and 1102.
9. Consultant is responsible for designating a specific person responsible for assuring nondiscrimination and non-harassment as provided in the Agreement. That named individual must investigate all complaints directed to them by District. District will refer complaints in writing, and investigations will be deemed concluded only upon submission of a written investigation report from the Consultant to the District. The scope of such investigations must include not only officers, employees, and agents of the Consultant, but also all subcontractors, subconsultants, materialmen, and 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. Failure to take appropriate action is a material breach of the Agreement.

SECTION III

DUTIES OF DISTRICT

1. District agrees to make available to Consultant all data and information in the possession of District which District deems necessary to the preparation of the work, and District will actively aid and assist Consultant in obtaining such information deemed necessary from other agencies and individuals.
2. The District will authorize a staff person as the District representative to confer with Consultant relative to Consultant services hereunder. The work in progress hereunder will be reviewed by District at each milestone or at the discretion of District. If the District determines that the work is satisfactory and meets the requirements of the Agreement, it will be approved. If the work is not satisfactory, District will inform Consultant of the changes or revisions necessary to secure approval. However, none of the proposed changes or revisions or anything else in this Agreement should be construed to relieve the Consultant of professional or legal responsibility for the performance of any services. Corrections to the work as a result of errors or omissions of Consultant will not result in additional costs or expenses to District.

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SECTION IV

FEES AND PAYMENT

1. District will pay for the services described in this Agreement according to the fee schedule set forth in Appendix Two attached hereto and incorporated herein by this reference. Payment for services and any other expenses related to this Agreement must not exceed the limit or limits shown in Appendix Two. Such payment is considered as full compensation for all labor, materials, supplies, equipment, and other items used in carrying out the services described in this Agreement.
2. Consultant must send all invoices to:

Santa Clara Valley Water District
Attention: Accounts Payable
P.O. Box 20670
San Jose, CA 95160-0670
3. Consultant must invoice for services on a monthly basis against the schedule of payments outlined in Appendix Two. Each monthly invoice must include a progress statement indicating whether or not the services are on schedule to be completed in accordance with Appendix Three. If completion of the services is not on schedule to be completed per Appendix Three, the progress statement must specify the anticipated length of the delay, the cause of the delay, the measures taken or proposed to mitigate the delay, and the timetable to implement those measures. In addition to ensuring that each invoice is accompanied with a progress statement, Consultant must also ensure that each invoice contains the following information:
 - a. Agreement Number.
 - b. Full Legal Name of Consultant/Firm.
 - c. Payment Remit-to Address.
 - d. Invoice Number.
 - e. Invoice Date (the date invoice is mailed).
 - f. Beginning and end date for billing period that services were provided.
4. If a progress statement is not attached to the invoice, or if the invoice does not contain the bulleted items above, that invoice will not be processed for payment.
5. Consultant must maintain records detailing the time worked by each employee and the rate at which the employee's time is being charged. When applicable, invoices must detail the time worked by each class of employee, and the rate at which the class of employee's time is being charged. In order to obtain reimbursement for allowable expenses, the statements must include an itemization of the actual expenses incurred.
6. Unless otherwise specified, when the total compensation payable under this Agreement exceeds twenty thousand dollars (\$20,000), ten (10) percent of each statement will be withheld by District and not paid to Consultant until thirty (30) calendar days after the assigned District representative signed off the final approval for the entire work as stated in Appendix One and close out of the Agreement. Provided that at any time after fifty (50) percent of the work has been completed, the District 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 fifty (50) percent of the work will continue to be withheld until final contract close out.

SECTION V

TIME OF BEGINNING AND SCHEDULE FOR COMPLETION

1. Consultant must begin work by the date indicated in the written Notice to Proceed from District. The notice will not be issued until after this Agreement has been approved and authorized by District.
2. The schedule for completion of the work is detailed in Appendix Three attached hereto and incorporated herein by this reference.

SECTION VI

CHANGES IN WORK

1. District may order, via a written amendment signed by each parties authorized representative, changes in scope or character of work, either decreasing or increasing the amount of Consultant's services.
2. This Agreement may be terminated for cause by either party for failure to comply with any terms and conditions of this Agreement, provided, however, that the party in breach has five (5) business days or such period as the parties may otherwise agree in writing to cure such breach following written notification. Additionally, this Agreement may be terminated for convenience by the District upon five (5) business days prior written notice to Consultant. In the event of termination of this Agreement, (i) the District's sole obligation will be to pay Consultant for any authorized work performed through the date of the termination, subject to the not-to-exceed amount for each task; and (ii) Consultant must provide the District with all deliverables and other tangible data created through the date of termination. This paragraph will not be deemed to waive, prejudice, or diminish any rights which the District or Consultant may have at law or in equity for an unlawful termination or other breach of this Agreement by the other party.

SECTION VII

DELAYS AND EXTENSIONS

In the event Consultant is delayed in performance of its services by circumstances beyond its control, District may in its discretion grant a reasonable adjustment in the Schedule of Completion. All claims for adjustments in Schedule of Completion must be submitted to the District representative by Consultant within thirty (30) calendar days of the time of occurrence of circumstances necessitating the adjustment.

SECTION VIII

RESOLUTION OF DISPUTES

1. In the event of a dispute regarding performance of any of the terms of this Agreement, the parties agree to proceed as follows:
2. Internal Review: If Consultant wants to dispute an interpretation or requirement, Consultant must invoke this provision and submit the particulars of Consultant's position in writing to the identified District Representative. District Representative must reply in writing to the Consultant. If Consultant is not satisfied by the response of the District Representative, Consultant may appeal to the District's Contract Administrator, or designee. To exercise this administrative remedy the Consultant must submit their written position, the District Representative's response and any other additional reply information the Consultant deems relevant to the decision, to the District's Contract Administrator, or designee, with a copy to the District Representative. The Contract Administrator may at his/her discretion hold a meeting, ask for additional written information, and/or issue a decision based on the information submitted. If after following the Internal Review Process the Consultant is still not satisfied, Consultant may seek external review.
3. External Review: Consultant, only after proceeding through the Internal Review Process, or District may seek external review where there is a dispute regarding an interpretation or requirement under the Agreement. The intent of this provision is to provide an informal dispute resolution measure which is alternative to a court action. The parties agree that they will submit the controversy to mediation before a mediator. The selection of the mediator and the ground rules for the mediation must be agreed upon by the parties. If agreement cannot be reached to pursue binding mediation or another acceptable alternative dispute resolution procedure, the matter may be submitted to Court for traditional resolution.

SECTION IX

MISCELLANEOUS PROVISIONS

1. District reserves the right to approve the project manager assigned Consultant to said work.
2. Consultant may not assign this Agreement without the express written consent of the District.
3. Consultant is employed to render a professional service only and any payments made to Consultant are compensation solely for such services as Consultant may render.
4. Any discretion or right to approve given to any party herein must be exercised in a reasonable manner.
5. All work performed, and documents produced, pursuant hereto will, upon completion, become the property of District. In the event the work is not completed, the completed portions thereof will become the property of District. However, District agrees that any

reuse of any of the materials so furnished by Consultant will be at District's own risk unless prior written approval has been given by Consultant for such reuse. Any and all original correspondence, memoranda, reports, designs, plans, specifications, data compilations, computer programs, or drawings delivered to District by Consultant under terms of this Agreement, in or by any medium (including computer files transmitted electronically or on disk) is deemed to be "work for hire" under the copyright laws of the United States and the copyright will belong to the District. Co-venturers, subcontractors, and vendors to Consultant likewise be bound by these copyright terms. District makes no copyright claim and requires no release for copyrighted material or trademarked names used incidentally by Consultant.

6. Consultant represents and warrants that neither it or its Parent or Subsidiary Company is currently acting as consultant or expert for any party in support of a claim, potential claim, or active or potential legal action against the District by such party. Consultant agrees that it or its Parent or Subsidiary Company will not so act as such consultant or expert for the duration of this Agreement without first obtaining the written consent of District.
7. Neither Consultant, nor any parent or subsidiary of Consultant, nor any affiliated entity sharing substantially similar ownership or control with Consultant, are eligible to bid on any contract to be awarded for the construction of any project which may be the subject of services provided under this Agreement.
8. Consultant hereby acknowledges that District policy prohibits the acceptance by District personnel of gifts of any kind from vendors or contractors. Consultant must honor this policy by not sending or bringing gifts to the District.
9. Consultant agrees that District, or its agent, has the right to review, obtain, and copy all records pertaining to performance of this Agreement. Consultant agrees to provide District, or its agent, with any relevant information requested and will permit District, or its agent, 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 for the purpose of determining compliance with this Agreement. Consultant further agrees to maintain such records for a period of three (3) years after final payment under this Agreement.
10. It is understood and agreed that the District does not wish to receive from Consultant any confidential information of Consultant or of any third party. Consultant represents and warrants that any information provided to the District in the course of entering into and performing work under this Agreement is not confidential or proprietary to Consultant or any third party. Consultant must maintain confidential all District information which may be disclosed to Consultant where such information by its nature would construed as being confidential by a reasonable person. Consultant will use its best efforts to prohibit any use or disclosure of the District's confidential information, except as absolutely necessary to perform work under this Agreement.
11. Consultant must notify the District in writing of each completed deliverable described in Appendix One. Within thirty (30) calendar days of Consultant's notice, the District must either (i) notify Consultant that the District accepts the deliverable, or (ii) notify the

Consultant of any deficiencies in such deliverable. If the District advises Consultant of deficiencies in the deliverable, Consultant must correct, at no cost to the District, those deficiencies as soon as possible and must again notify the District upon completion. The District must then respond to Consultant's notice within thirty (30) calendar days of receipt, and Consultant must correct at no cost to the District any further deficiencies noted. This process will continue until Consultant has corrected all deficiencies.

12. This Agreement, which includes the terms and conditions, Appendix One, Appendix Two, Appendix Three, and Appendix Four, 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 signed by a duly authorized representative of the party against whom enforcement is sought.

SECTION X

INDEMNIFICATION

Notwithstanding any other provision of this Agreement, Consultant agrees to indemnify, defend and hold harmless the District, 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.

SECTION XI

INSURANCE

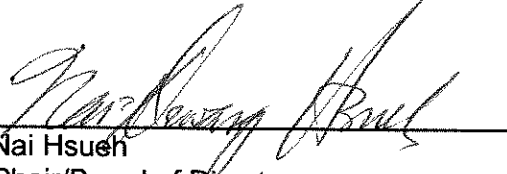
Consultant's insurance requirements, if any, are set forth in Appendix Four attached hereto and incorporated herein by this reference.

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IN WITNESS WHEREOF, the parties have executed this Agreement the day first hereinabove written.

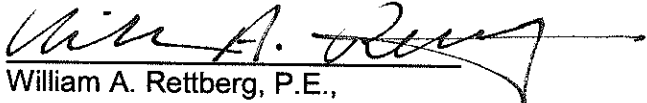
SANTA CLARA VALLEY WATER DISTRICT
"District"

By:


Nai Hsueh
Chair/Board of Directors

GEI CONSULTANTS, INC.
"Consultant"

By:


William A. Rettberg, P.E.,
Vice President

Firm Address:
180 Grand Avenue, Suite 1410
Oakland, CA 94612

ATTEST:


Michele L. King, CMC
Clerk/Board of Directors

"The official signing for Consultant certifies, to the best of his or her knowledge and belief, that neither Consultant nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency."

NOTE: "No representative may obligate the District to pay fees in excess of the amount in Appendix Two without written authorization from the Board of Directors or appropriate Executive Officer, in accordance with Board Governance Policies."

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APPENDIX ONE SCOPE OF SERVICES

CALERO AND GUADALUPE DAMS SEISMIC RETROFITS PROJECT

PLANNING AND ENVIRONMENTAL SERVICES

This Appendix, Scope of Services, describes the professional planning and environmental services (Planning Consultant Services) tasks to be undertaken by the Consultant for the Calero and Guadalupe Dams Seismic Retrofit Project (Project).

The purpose of the Planning Consultant Services is to provide planning and environmental studies that support District decisions and final designs (by others) to resolve seismic stability and flood and outlet risks at Calero and Guadalupe Dams.

I. PROJECT OBJECTIVES

A. The District's objectives for the Project are to make improvements necessary to:

1. Stabilize the Calero and Guadalupe Dams embankments for the Maximum Credible Earthquake (MCE), modify or replace the outlet works if inadequate, and modify the spillways to increase freeboard during a Probable Maximum Flood (PMF) event or for additional seismic freeboard, if required;
2. Modify embankment/s of Calero Dam to support a potential future expansion of reservoir storage;
3. Relocate the Guadalupe Dam intake structure out of the upstream berm;
4. Breach Fellow's Dike and relocate all historic structures;
5. Incorporate other measures to address seismic and other deficiencies that are identified through the Project delivery process.

B. Planning Consultant's Services will support the District's objectives for the Project as follows:

1. Resolve the seismic deficiencies per the State of California, Department of Water Resources, Division of Safety of Dams (DSOD) standards. Attachment Four—Reference Materials provides a list of technical reference material applicable to this Project;
2. Meet the District's Dam safety and operation and maintenance requirements;
3. Meet the requirements identified in the District's Quality Management System procedures. Attachment Five—District Procedures & Work Instructions provides a list of District procedures and work instructions to be performed by the Consultant;

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4. Meet the requirements of all federal, state, and local laws and regulations required for Project delivery;
5. Meet requirements of the resource and regulatory agencies (permitting agencies) including DSOD;
6. Address all stakeholders' interests;
7. Provide a recommended alternative for each dam to resolve the seismic deficiencies per DSOD and all other applicable engineering standards;
8. Develop sufficient information and analysis to enable District's Board of Directors to make Project decisions.

II. INTENT

- A. Professional Services—The District intends to retain three separate consulting firms to deliver the Project. The planning, design, and construction management firms will each be responsible for performing professional services appropriately relating to the Project. The Planning Consultant (Consultant) will be responsible for the preparation of the planning study and environmental documents, and for providing Project management services associated with the Consultant's services. In a supportive role, the Consultant will be responsible for reviewing design work for consistency with the planning assumptions/requirements, and supporting the District in securing resource agency permits.
- B. Conflict of Interest—The prime consultants and their sub-consultants for each of the three separate professional services transactions (referred to in II.A. above) must be entirely unique; all prime or sub-consultant firms in contract with the District for planning, design or construction management anticipated services will be precluded from proposing and/or contracting with the District for the other two professional service transactions noted above. However, subcontractors, vendors, and suppliers providing non-professional services, such as but not limited to lab testing, soil borings, or other technical services may propose and/or contract with prime consultants or the District for each of the separate professional services referenced II.A. above.

III. PROJECT BACKGROUND

This Project will remediate seismic deficiencies at Calero and Guadalupe Dams identified in the Seismic Stability Evaluation of Calero and Guadalupe Dams (SSE1B-B & SSE1B-C) Reports dated October 26, 2012 and May 22, 2012, respectively. The SSE1B findings conclude that the Calero and Guadalupe Dams have inadequate seismic stability, under the anticipated Maximum Credible Earthquake. There are currently reservoir operating restrictions on both as interim risk reduction measures, until the seismic deficiencies are remediated. These restrictions have been approved by the Division of Safety of Dams (DSOD). DSOD also expects that the remedial construction work will be completed by June 2019. In order to meet the construction schedule, timely completion of this Project is essential.

APPENDIX ONE SCOPE OF SERVICES

A DSOD restriction on Calero Reservoir also exists due to deficiencies of Fellows Dike (which forms part of Calero Reservoir). A Planning Study Report for the Calero /Fellows Dike was prepared in March 2010 by District staff. The staff-recommended project was to breach the dike and allow waters of Calero Reservoir to inundate lands beyond the current area of inundation.

Calero Dam:

Description of Dam and Reservoir

The Calero Dam was constructed in 1936. Calero Reservoir has a capacity of 9,934 acre-feet. The reservoir stores watershed runoff, imported water, and water diverted from Almaden Reservoir through the Almaden-Calero canal. The reservoir stores water for replenishing the groundwater system and supply to the treatment plants. The County of Santa Clara Parks and Recreation Department also operates a recreation program on the reservoir.

The dam is a zoned earth fill dam with upstream and downstream embankment zones. The upstream embankment zone is constructed with less pervious material to limit seepage. No internal drainage or filter zones are incorporated in the dam.

Calero Reservoir normally operates at its maximum operating level each year during the winter and is drawn down during the period from late spring to early fall as the water is used. Water into the reservoir is regularly transferred from nearby Almaden Reservoir to Calero via the Almaden-Calero Canal, which has a capacity of about 100 cubic feet per second (cfs).

Spillway and Outlet Works

The spillway is a reinforced concrete channel located within the ridge about 900 feet from the right abutment of the dam. It has a weir length of about 82 feet and a capacity of 5,260 cfs.

The outlet works consist of a submerged intake structure with a hydraulically-operated slide gate, a 36-inch diameter, 481-foot long cast-in-place concrete outlet pipe with a steel liner under the dam, and a concrete outlet structure housing the control valves. The outlet is controlled downstream with a 30-inch butterfly valve operated from the outlet structure. The outlet pipe is connected to the Almaden Valley Pipeline downstream of the outlet structure at the Calero Valve Yard, about 700 feet downstream of the dam.

Partial List of Issues to be Considered

Seismic deformation analysis has determined that unacceptable horizontal and lateral displacements will occur in Calero Dam and remediation of the seismic deficiencies are necessary.

Seepage at the abutment or through the embankment of Calero Dam has occurred since the first filling of the reservoir in 1937. Following investigations concrete lined ditches and weirs were installed in 1967 to collect and measure the seepage. The District also

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implemented a grouting program in 1991 to attempt to reduce seepage through the right abutment. However the grouting did not generally reduce the seepage at the dam. Given the complex relationship between the embankment and foundation it is likely that the design of an improved seepage collection system will require a more detailed understanding of the seepage sources for effective capture.

Over the years the District has examined the feasibility of increasing the Calero Reservoir capacity by raising the dam. A 1966 study found it feasible to raise the dam by 30 feet. A subsequent study in 1982 updated the 1966 study findings.

The most recent PMF study was performed by DSOD in 1981 using HMR 36 and HMR 49. DSOD policy after the 1999 release of HMR 58/59 requires that new dams or major work be designed under HMR 59. HMR 59 has a tendency to increase Probable Maximum Precipitation (PMP) values in small watersheds. The Calero spillway may need modification if found to be inadequate.

Guadalupe Dam

Description of Dam and Reservoir

The Guadalupe Dam was constructed in 1936. The reservoir has a capacity of 3,460 acre-feet.

The Guadalupe Dam was designed as an earthfill dam with upstream and downstream embankment zones. The upstream and downstream slopes are approximately 2.5H: 1V. Subsequent investigations have shown the upstream and downstream embankment materials are similar in nature and engineering characteristics, thus the dam could essentially be treated as a homogeneous dam. No internal drainage or filter zones are incorporated in the dam.

The upstream embankment was buttressed in 1972 with a compacted clay berm designated as the upstream berm that starts at about El. 572.3 ft (NAVD88) and slopes down at about 5H: 1V into the reservoir. The new embankment berm was constructed on the upstream face to stabilize an incipient tension crack indicative of possible slope failure observed in the center of the embankment. A concrete parapet wall was also constructed along the crest of the dam, near the upstream face, to restore about 2.5 ft freeboard lost to normal embankment settlement. The wall is about 536 ft long.

Spillway and Outlet Works

The spillway is a reinforced concrete-lined side-weir channel cut into the left abutment and has a capacity of 9,000 cfs.

The outlet works consists of an intake structure, an outlet pipe and an outlet structure. The intake is 72-inch-diameter reinforced concrete box-type structure which was modified in 1972. The estimated deformations of the upstream embankment / berm have the potential to impact the intake and associated hydraulic lines that control the slide gate in the intake structure. Centered underneath the dam is the low-level outlet pipe which is a 36-inch-diameter, 720-foot long cast-in-place concrete pipe with steel liner. The outlet structure is located at the downstream toe and includes a 30-inch butterfly

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valve used to control flow to Guadalupe Creek. The outlet pipe discharges to a stilling basin before reaching the creek channel.

Partial List of Issues to be Considered

The draft 2008 hydrology study using HMR 59 indicated that the spillway will pass the PMF. During the PMF, reservoir will be up against the parapet wall. It will need to be determined if the wall is structurally capable of withstanding the PMF behind the parapet wall.

Seismic deformation analysis has determined that unacceptable horizontal and lateral displacements will occur in Guadalupe Dam and remediation of the seismic deficiencies are necessary.

Seismic deformation analysis undertaken has determined that a lateral displacement near the upstream toe of the embankment could be as high as 4 feet. The existing intake structure is not expected to survive the lateral displacement. The inlet structure will need to be moved outside the footprint of the deformed embankment.

Fellows Dike

Fellows Dike is located along the southeast shore of Calero Reservoir. It is approximately 1,900 feet long, with a height that ranges from zero feet at the south end to a maximum of approximately 12 feet at the north end.

Total storage of Calero Reservoir is 9,934 acre-feet. In January 1998, DSOD inspected Fellows Dike and determined that the dike is under their jurisdiction. The dike was found to be in poor condition and DSOD requested that no water be stored against it which resulted in a reduction of 2,000 acre feet or 20% of total storage capacity at Calero Reservoir. Subsequently, a geotechnical investigation conducted on Fellows Dike in 2001 found that the dike would need improvement to bring the facility up to DSOD standards before it could impound water. The dike foundation adjacent to Calero Creek contains several pockets of soils that may liquefy under heavy earthquake shaking.

A minimum operational level of 4,000 acre-feet of water in Calero Reservoir is required for emergency conditions. Therefore, the impact of the 2,000 acre-feet of water loss is that the active storage is reduced from approximately 6,000 acre-feet to 4,000 acre-feet.

A Planning Study Report for the Calero /Fellows Dike was prepared in March 2010 by District staff. The staff-recommended project was to breach the dike and allow waters of Calero Reservoir to inundate lands beyond the current area of inundation. The project components included demolishing existing facilities except the historic structures, relocating eight historic structures above the inundation elevation, treating contaminated soils to acceptable levels, breaching the mid-section of dike, and replanting lost vegetation from dike breach.

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IV. PROJECT COMPONENTS AND ELEMENTS

The Project involves improvements to three District facilities which are inter-related. This Project has two Components:

Component 1 refers to Calero Dam (including Fellows Dike), and,
Component 2 refers to Guadalupe Dam.

The improvements to these Components consist of:

- A. Component 1): Improvements to stabilize the Calero Dam embankments for the Maximum Credible Earthquake, possibly modify or replace the outlet works, possibly modify the spillway to increase freeboard during a PMF event, and possibly modify embankments of the dam, if required, to support a larger capacity reservoir. Improvements also include the breach of Fellow's Dike and relocation of historical structures.
- B. Component 2): Improvements to stabilize the Guadalupe Dam embankments for the Maximum Credible Earthquake, possibly modify or replace the outlet works, and possibly modify the spillway to increase freeboard during a PMF event.

All of the Project "Elements" for each Component have yet to be determined, pending District decisions based on investigation and analysis to be conducted by the Consultant under this Scope of Services. The Project Elements could include:

- a. Embankment
- b. Spillway
- c. Intake structure
- d. Outlet pipe
- e. Outlet structure
- f. Upstream concrete slope protection

For Calero Dam (including Fellows Dike) (Component 1) the Elements currently known to be likely included are:

- a. Embankment
- b. Intake structure (to meet District requirement of out-of water inspectible hydraulic lines and controls)
- c. Outlet structure (as existing structure will most likely be buried by the downstream buttress)

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For Guadalupe Dam (Component 2) the Elements currently known to be likely included are:

- a Embankment (except if a decision is made to notch the spillway)
- b Intake structure (to move it away from the footprint of the seismically deformed embankment).
- c Outlet structure (as existing structure will most likely be buried by the downstream buttress)

V. PROJECT TASKS

The Planning Consultant will perform the services described in this Scope of Services. The Consultant will prepare a Planning Study Report (PSR) for each of the Components 1 and 2. The PSR for Fellow Dike has previously been prepared by the District. The recommendations of that PSR will be incorporated by the Consultant into the PSR for Component 1. The California Environmental Quality Act (CEQA) document/s for the entire Project (both Components) will be prepared by the Consultant. The Consultant will prepare two CEQA documents, one for Component 1 and one for Component 2. The Consultant will submit the CEQA deliverables for Component 1 and Component 2 as independent documents on a staggered basis to facilitate District review.

Services to be provided by the Consultant are described in the tasks below.

Consultant must receive written authorization from the District Project Manager prior to initiating work on any of the tasks and subtasks identified as "conditional".

TASK 1—PROJECT MANAGEMENT

Subtask 1.1 Prepare Planning Phase Work Plan

Subtask 1.2 Provide Monthly Project Status/Progress Reports

Subtask 1.3 Attend Monthly Progress Meetings/Coordination

Subtask 1.4 Plan and Attend Workshops/Coordination Meetings

TASK 2—PLANNING STUDY

Subtask 2.1 Prepare Problem Definition

Subtask 2.1.1 Perform Background Review and Data Collection

Subtask 2.1.2 Conduct Investigations and Analysis

Subtask 2.1.2.1 Prepare PMP and PMF Hydrologic Studies for Calero and Guadalupe Reservoirs:

Subtask 2.1.2.2 Perform Additional Geotechnical Foundation Investigation for Downstream Buttress.

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Subtask 2.1.2.3 Analyze Seepage at Calero Dam

Subtask 2.1.2.4 Provide Assessment of Outlet Works at Calero Dam and at Guadalupe Dam for Emergency Drawdown

Subtask 2.1.2.5 Perform Condition Assessment of Calero Reservoir Outlet Works - Conditional:

Subtask 2.1.2.6 Perform Condition Assessment of Guadalupe Reservoir Outlet Pipe - Conditional

Subtask 2.1.2.7 Inspect and Evaluate Upstream Concrete Slope Panels at Guadalupe Dam.

Subtask 2.1.3 Prepare Problem Definition Report

Subtask 2.2 Prepare Planning Study Report

Subtask 2.2.1 Develop Alternative Evaluation Methodology

Subtask 2.2.2 Prepare Cost-Benefit Analysis (Guadalupe Dam Only)

Subtask 2.2.3 Prepare Feasible Alternatives Report

Subtask 2.2.4 Develop Staff-Recommended Alternative

Subtask 2.2.5 Prepare Planning Study Report

Subtask 2.2.6 Prepare Transition Reports

TASK 3—ENVIRONMENTAL DOCUMENTATION AND PERMIT SUPPORT

Subtask 3.1 Develop Initial Regulatory and CEQA strategy, and coordination with regulatory agencies

Subtask 3.2 Perform Environmental Investigations and Studies

Subtask 3.2.1 Gather and Organize Environmental Information Relevant to the Project

Subtask 3.2.2. Prepare Base Map

Subtask 3.2.3 Summarize Environmental Conditions Based on Existing Data

Subtask 3.2.4 Prepare Field Investigation Plan

Subtask 3.2.5 Conduct Field Investigations

Subtask 3.3 Prepare Project Description and Initial Study Checklist (IS)

Subtask 3.3.1 Prepare Project Description

Subtask 3.3.2 Prepare Initial Study Checklist (IS)

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Subtask 3.4 Prepare Draft Environmental Impact Report

Subtask 3.4.1 Prepare Notice of Preparation

Subtask 3.4.2 Conduct Environmental Scoping

Subtask 3.4.3 Prepare Administrative Draft EIR (ADEIR)

Subtask 3.4.4 Prepare Draft EIR

Subtask 3.5 CEQA Public Noticing and Participation Requirements

Subtask 3.5.1 Prepare Information for District Website and Filing Draft EIR with the State Clearinghouse

Subtask 3.5.2 Prepare Notice of Completion for Filing with State Clearinghouse

Subtask 3.5.3 Prepare for and Attend Public Hearing

Subtask 3.5.4 Respond to Public Comments

Subtask 3.6 Prepare Final Environmental Impact Report

Subtask 3.6.1 Prepare Final EIR

Subtask 3.6.2 Prepare Findings and Statement of Overriding Considerations

Subtask 3.6.3 Prepare Notice of Determination (NOD)

Subtask 3.6.4 Assist with Public Hearing and Certification of EIR

Subtask 3.7 Prepare Regulatory Permitting

Subtask 3.7.1 Assist with Initial Regulatory Agency Consultation

Subtask 3.7.2 Prepare Draft Permit Applications

Subtask 3.7.3 Prepare NMFS Biological Assessment

Subtask 3.7.4 Prepare Habitat Mitigation and Monitoring Plan

Subtask 3.7.5 Prepare Final Permit Applications

Subtask 3.7.6 Provide Support during Permit Negotiation

Subtask 3.7.7 Prepare Reservoir Dewatering Plans, Fish Rescue And Relocation Plans And Flow Maintenance Plans

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TASK 4—DEVELOP ON-SITE BORROW AND SPOIL REQUIREMENTS

Subtask 4.1 Conduct a Borrow and Spoil Siting and Suitability Study

Subtask 4.2 Identify Preferred Borrow and Spoil Sites

TASK 5—DESIGN SUPPORT

Subtask 5.1 Review of 30% Design Deliverables

Subtask 5.2 Review of 60% Design Deliverables

Subtask 5.3 Review of 90% Design Deliverables

TASK 6—SUPPLEMENTAL SERVICES

A detailed description of each task is given below along with the main assumptions and deliverables.

TASK 1—PROJECT MANAGEMENT

The objective is to develop and integrate planning phase scope, schedule, cost, quality, risk, staffing, communication, and resources in a manner to fulfill the terms of the Agreement. The scope and deliverables will include the items described below.

Subtask 1.1—Prepare Planning Phase Work Plan

1. The Consultant will develop the work plan in accordance with District's Quality Environmental Management System (QEMS) document #W75102. The work plan will consist of a stand-alone document that provides discussions of Project Objectives identified above and detailed descriptions of the specific work to be performed. The work plan will detail the Consultant's approach to undertaking the two Components: Calero Dam (including Fellows Dike) (Component 1), and Guadalupe Dam (Component 2), Scope of Services, while integrating specific subtasks of the work for efficiency, where feasible. At a minimum, the Planning Phase Work Plan will include: the Consultant team organization; team member roles and responsibilities; stakeholder, management, document control, and team communication, coordination and protocols; technical and managerial work activities, quality assurance and quality control plan; key deliverables; task level resource and cost-loaded schedule; Project controls and reporting.
2. Consultant will provide a quality assurance and control (QA/QC) plan as a section of the Planning Phase Work Plan describing the Consultant's procedures to document that Consultant's services and deliverables meet District requirements and accepted practices and standards of Consultant's and its subconsultants professions. The QA/QC plan must contain details and methodology for reviewing Consultant deliverables including calculations, Technical Memorandums (TMs), cost estimates, plans and specifications, and inter-disciplinary and constructability reviews prior to submittal of such deliverables to District. Consultant must provide, upon District request, records

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to demonstrate that QA/QC reviews were performed on Consultant's and subconsultants' deliverables.

3. Consultant will prepare an overall Microsoft® Project Schedule for the Project services to lay out the tasks and milestones for the planning and environmental evaluations. Consultant will monitor compliance with the schedule, update it monthly as necessary, and distribute it for review at monthly progress meetings. The schedule will include all preparation, permitting, environmental compliance, geotechnical field investigations, survey, laboratory testing, engineering analyses, and report preparation, and time for the District to review deliverables necessary to meet the Project Objectives. The schedule will recognize and incorporate key milestones of the Project that are critical for the timely completion of the Project.

Subtask 1.1—Assumptions

None.

Subtask 1.1—Deliverables

1. Draft and Final Planning Phase Work Plan.

Subtask 1.2—Provide Monthly Project Status/Progress Reports

1. The Consultant will provide monthly Project status/progress reports to the District. The status reports will provide a brief summary of the work performed and the remaining work for each task. The Project status/progress report will include milestones and deliverables completed to date, an updated schedule, estimate of work required to complete the Project, and any anticipated changes to the Agreement that may be necessary to complete this Scope of Services. Any fees or time constraints, and corrective actions if appropriate, will be documented in the monthly Project status/progress reports.
2. The monthly Project status/progress report will include:
 - a. An assessment of actual versus planned progress in completing the Scope of Services, including a description of the tasks, and deliverables completed to-date;
 - b. 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;
 - c. For each task, the percentage of the fees incurred for such task compared to dollar amount allocated to such task;
 - d. A statement that all tasks will be completed within the agreed upon not-to-exceed total amount of this Agreement described in Appendix Two, Fees and Payments;

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- e. A statement that progress in the performance of this Scope of Services required by this Agreement is on schedule within the time line set forth in Appendix Three, Schedule of Completion; or, if completion of the services is not on schedule, 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;
- f. A look-ahead schedule listing deliverables and activities planned for the next 2 months;
- g. A summary of proposed changes to the Scope of Services, if required, including justifications for such changes;
- h. A Small Business Enterprise (SBE) participation report to document the level of SBE participation throughout the Project;
- i. Action Item and Decision Log: This log will document action items and Project concerns and issues throughout the term of the Agreement which require resolution by District and/or Consultant;
- j. Draft billing statements, transmitted with the monthly Project status/progress reports, will be organized such that the billing categories correspond with the Scope of Services tasks. Draft billing statements will include a summary of labor expenditures, direct costs, and billed sub-consultant charges. Draft billing statements will be prepared in accordance with the requirements stated in the Standard Consultant Agreement, Section IV Fees and Payment, as well as Appendix Two, Fees and Payments. An Adobe PDF version will be provided by Consultant for preliminary review by District.

Subtask 1.2—Assumptions

- 1. Monthly Project status/progress reports will be provided during the Agreement term as directed by District.
- 2. District will provide a billing and reporting template at kick-off meeting.

Subtask 1.2—Deliverables

- 1. Monthly Project status/progress reports (Electronic MSWord and MS Excel).
- 2. Draft monthly billing statement.

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Subtask 1.3—Attend Monthly Progress Meetings/Coordination

1. The Consultant will attend monthly progress meetings at the District offices (in San Jose, CA), as well at the DSOD offices (in Sacramento, CA) as necessary and directed by the District. At least one week prior to the meetings the Consultant will prepare and forward the meeting agenda to the District. Following each progress meeting, the Consultant will prepare and submit a draft electronic copy of the meeting summary notes to the District's Project Manager for review and comment. Consultant will incorporate review comments and will submit final meeting minutes notes to the District. The monthly meetings will inform the District and Project members of progress to date, key issues and critical activities.
2. Telephone conference calls (at least once every week) will occur between the District's Project Manager and Consultant Project Manager to coordinate specific activities occurring and to discuss Project issues and needs.
3. In addition to Consultant's monthly progress meetings, Consultant will provide Project management services that include coordination of its subconsultants, managing its subconsultant invoicing and payment, and managing the requirements for SBE participation and contracting.
4. Consultant will establish a password-protected website (SharePoint) where available information will be compiled for access by the District and Consultant team members.
5. All Project-related correspondence with DSOD will be through the District.

Subtask 1.3—Assumptions

1. 36 Monthly Progress meetings will occur over the term of the Agreement.
2. Each of the telephone conference calls will last no more than one hour.

Subtask 1.3—Deliverables

1. Draft and Final meeting agendas and meeting notes.
2. SharePoint site for shared access to compiled Project information.

Subtask 1.4—Plan and Attend Workshops/Coordination Meetings

1. The Consultant will plan and attend "issue specific" workshops and coordination meetings as detailed in this Scope of Services. These meetings and workshops will be held at key decision points, and when consensus or stakeholder outreach is required, as determined by the District. The Consultant will also prepare, organize, and attend a kick-off meeting with District to review the Project scope of services schedule, design requirements etc.
2. At least one week prior to the meeting/workshops, the Consultant will prepare and forward the meeting/workshop agenda to the District. Workshops will

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include topical presentations by the Consultant and District (as needed), discussion, documentation, and action items.

Subtask 1.4—Assumptions

1. The Consultant will conduct 14 workshops/review meetings on Calero Dam (including Fellows Dike) (Component 1) and, Guadalupe Dam (Component 2) for the following topics:
 - a. Project kick-off meeting (combined meeting for Component 1 and Component 2).
 - b. PMP / PMF workshop (combined meeting for Component 1 and Component 2).
 - c. Project Requirements and Risk Management workshop (combined meeting for Component 1 and Component 2).
 - d. Development of alternatives criteria (combined meeting for Component 1 and Component 2).
 - e. Borrow and spoil siting (combined meeting for Component 1 and Component 2).
 - f. Evaluation and ranking of Alternatives (separate meetings for Component 1 and Component 2).
 - g. Feasible Alternatives workshop (separate meetings for Component 1 and Component 2).
 - h. Planning Study Report review meeting (separate meetings for Component 1 and Component 2).
 - i. Environmental (CEQA) kick-off (combined meeting for Component 1 and Component 2).
 - j. Environmental permitting (separate meetings for Component 1 and Component 2).
2. The meetings/workshops will appropriately consider Fellows Dike.

Subtask 1.4—Deliverables

1. Meetings / Workshops.
2. Draft and Final Meeting materials (agenda and handouts).
3. Draft and Final Meeting minutes.

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TASK 2—PLANNING STUDY

1. The Consultant will prepare two Planning Study Reports (PSRs), one for Calero Dam and Fellows Dike (Component 1) and one for Guadalupe Dam (Component 2). These separate PSRs will be used as the basis for separate CEQA documents.
2. The Consultant will develop and evaluate alternatives which meet the Project Objectives and will identify a recommended Project for the design phase for both Calero Dam (including Fellows Dike) and Guadalupe Dam, which maximizes the benefit to life-cycle cost ratio for the District. Project requirements and objectives will be established by the District and reviewed by the Consultant. The Planning Study Scope of Services and deliverables will be performed and prepared in accordance with the District's QEMS procedures included in Appendix One, Attachment Five. The Planning Phase investigations and analysis shall be consistent with the District's Water Supply and Infrastructure Master Plan (WSIMP) incorporated herein by this reference.

Subtask 2.1—Prepare Problem Definition

Under subtask 2.1 Consultant will prepare draft and final Problem Definition Reports (PDRs). The PDRs will incorporate all activities required to define the Project problem, background research and data collection, field investigations, understanding of the subject facilities and related faculties, and confirmation of objectives, constraints, and opportunities. The PDRs will also include a section on technical and Project risks. The Consultant will perform the following subtasks in close coordination with the District staff to develop PDRs that will provide a sound basis for the subsequent PSRs.

Subtask 2.1.1 —Perform Background Review and Data Collection

Sub-task 2.1.1—Consists of Activities A through E as described below:

- A. Assemble Available Information. The Consultant will assemble available information provided by the District as well as collecting information/data that may be available from other sources, as identified by the District, to confirm and document the problem, constraints, and options. The Consultant will also consult with District staff to confirm the customer/partner/stakeholder list, Project challenges, Project Requirements, objectives, and operational and environmental constraints. The Consultant will be responsible for obtaining all Project requirements and constraints from the District, DSOD, resource agencies and other stakeholders. The Consultant will work through the District to conduct stakeholder interviews to confirm Project interests, determine and rank selection criteria.
- B. Review Existing Data. The Consultant will review existing analyses, reports, memoranda, and, correspondence relative to the Project. The review will include documents relevant to the potential Dam modification, outlet modification, and, spillway modification. The Consultant will review and confirm Project specific and District-wide objectives with the District, DSOD, and other resource agencies and stakeholders.

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- C. Collect Right-of-Way Information. Consultant will collect property boundaries and delineation/tract register information.
- D. Collect Utility and Encroachment Information. Consultant will collect utility and encroachment information within the maximum probable Project footprint.
- E. Field Reconnaissance. Consultant will perform field reconnaissance of the Project site and potential borrow areas to support feasibility level design activities.

Subtask 2.1.1—Assumptions

- 1. District will provide electronic copies (if available) of information for use by the Consultant.
- 2. The District will provide boundary information in a hard copy format and electronic files (GIS and/or AutoCAD) for incorporation into Consultants maps.
- 3. Activity C includes one meeting with the District's Real Estate Services Unit to discuss strategies and schedules for reconnaissance/field study access onto adjacent properties, and District procedures for field clearances to incorporate in Consultant's field work plans. Meeting will also include discussion of temporary construction or permanent easements that may be needed for conceptual alternatives to be considered in the planning phase.
- 4. Activity D assumes review of existing utility and encroachment information is limited to expected on-site use areas of District reservoirs. If utility and encroachment studies are required for off-site areas, these services would be developed under Task 6, Supplemental Services.
- 5. Field reconnaissance under Activity E will be conducted by Consultant in the company of District staff who are familiar with the dams and can arrange access, and includes visual inspections and photographs of the following key facilities/areas:
 - a. Spillway areas of both dams, to evaluate potential modifications to the spillway and prepare for the PMP and PMF studies, as described in Subtask 2.1.2 1.
 - b. The right abutment and other areas of Calero Dam to observe the extents of historic seepage and to assist in the scoping any additional geologic reconnaissances or subsurface exploration programs that would be necessary for the seepage evaluation described in Subtask 2.1.2.3.
 - c. Outlet works of both dams to observe downstream areas such as the stilling box and downstream outlet structures, and visible portions of the upstream control facilities above the reservoir waterline. The Corrosion and ROV sub-consultants will also be on-site during this reconnaissance to observe the upstream outlet condition, and plan for underwater video

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inspections and of the intake towers and outlet pipes and hydraulic lines, as described in Subtasks 2.1.2.5 and 2.1.2.6.

- d. Upstream concrete slope panels at Guadalupe Reservoir to photograph and observe visible portions of the concrete above the reservoir waterline.
6. Except for deliverables noted below, information, observations and conclusions from Subtask 2.1.1 will be incorporated into the PDRs pursuant to Subtask 2.1.3.

Subtask 2.1.1—Deliverables

1. Memoranda listing documents reviewed (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
2. Memoranda confirming Project Objectives and Project Requirements (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 2.1.2—Conduct Investigations and Analysis

Consultant will perform the following:

Subtask 2.1.2.1—Perform PMP and PMF Hydrologic Studies for Calero and Guadalupe Reservoirs

The Consultant will perform a modified HMR Report No. 58/59 study for Calero and Guadalupe Reservoirs following DSOD Interim Hydrology Policy. Based on the PMP results, a PMF analysis will be prepared to calibrate and verify the PMF runoff models and propose spillway modifications necessary to pass the PMF. The Consultant will support the District in its negotiations with DSOD regarding spillway modifications designed to pass 1) the HMR 36 PMF or 2) the modified HMR 58/59 PMF. The result of the PMP/PMF studies will be selection of the design basis flood for subsequent planning and future design.

Subtask 2.1.2.1—Assumptions

None.

Subtask 2.1.2.1—Deliverables

1. PMF Report (one each for Calero and Guadalupe Reservoirs) including spillway modification details.

Subtask 2.1.2.2—Perform Additional Geotechnical Foundation Investigation for Downstream Buttress.

The Consultant will drill and sample up to 6 exploratory borings downstream of the existing Calero and Guadalupe Dam embankments (3 at each dam) to identify the thickness and stratigraphy of existing alluvium and the depth of and lateral extent of work necessary for conceptual design of a stability buttress. The Consultant shall be responsible for obtaining all permits, permissions, approvals and preparing all CEQA

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documentation required for investigations to be performed. The geotechnical data obtained under this subtask will be appended to the Transition to Design Report prepared under Subtask 2.2.6.

Subtask 2.1.2.2—Assumptions

Consultant will design the geotechnical studies with the goal of avoiding impacts through the proper timing and placement of study locations. Consultant will attempt to design the studies to avoid impacts to wetlands, sensitive species habitat, and cultural resources sites and include avoidance and minimization measures such as pre-study surveys to avoid impacts. If impacts can be avoided, it is assumed that the work can be conducted under a CEQA Section 15306 (Class 6) Categorical Exemption for information collection and Consultant will prepare Categorical Exemption documentation under District guidance for their preferred format. If impacts cannot be reasonably avoided then Consultant will prepare a brief Initial Study and Negative Declaration or Mitigated Negative Declaration to satisfy CEQA requirements under Task 6, Supplemental Services.

Subtask 2.1.2.2—Deliverables

1. Geotechnical Exploration Memorandum (one each for Calero and Guadalupe Dam) summarizing the results of the additional exploration at the dams.
2. Geotechnical data Appendix to the Transition to Design Report (one each for Calero and Guadalupe Dam).
3. CEQA documentation for approvals and permits required for site investigations.

Subtask 2.1.2.3—Analyze Seepage at Calero Dam

1. The Consultant shall review existing information and assess the areas of historic seepage at the embankment of Calero Dam. Seepage conditions at Calero Dam are generally due to the combined effects of challenges faced during dam construction and complex geologic conditions in the dam foundation. Seepage appears to daylight in three distinct areas termed by the District as the "right abutment," the "embankment," and the "left toe" areas. The Consultant will address the District's requirement to improve the overall seepage monitoring and collection system.
2. The Consultant shall submit a Technical Memorandum to the District on the problem with recommendations for any geotechnical investigation as needed. After such geotechnical investigation, the Consultant shall submit a Report to the District outlining options for an improved seepage collection and monitoring system as well as recommendations. The recommendations, if approved, shall eventually be incorporated in the Staff-Recommended Alternative.

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Subtask 2.1.2.3—Assumptions

Consultant will design the geotechnical studies, if needed, with the goal of avoiding impacts through the proper timing and placement of study locations. Consultant will attempt to design the studies to avoid impacts to wetlands, sensitive species habitat, and cultural resources sites and include avoidance and minimization measures such as pre-study surveys to avoid impacts. If impacts can be avoided, it is assumed that the work can be conducted under a CEQA Section 15306 (Class 6) Categorical Exemption for information collection and Consultant will prepare Categorical Exemption documentation under District guidance for their preferred format. If impacts cannot be reasonably avoided then Consultant will prepare a brief Initial Study and Negative Declaration or Mitigated Negative Declaration to satisfy CEQA requirements as a Supplemental Services task.

Subtask 2.1.2.3—Deliverables

1. Technical Memorandum on historic seepage at Calero Dam.
2. Report on Improved Seepage Collection and Monitoring System at Calero Dam.
3. CEQA documentation for approvals and permits required for site investigations.

Subtask 2.1.2.4—Provide Assessment of Outlet Works at Calero Dam and Guadalupe Dam for Emergency Drawdown

Based on information collected and existing data reviewed in Subtask 2.1.1 the Consultant shall analyze the hydraulic capacity of the outlet works at both Calero Dam and Guadalupe Dam and their ability to meet DSOD emergency drawdown requirements as well as other District operational requirements. The Consultant will present the information with analysis and recommendations in Technical Memoranda, one for Calero Dam and one for Guadalupe Dam.

Subtask 2.1.2.4—Assumptions

None.

Subtask 2.1.2.4—Deliverables

1. Draft and Final Technical Memoranda on Assessment of Outlet Works for Emergency Drawdown (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 2.1.2.5—Perform Condition Assessment of Calero Reservoir Outlet Works - Conditional

The outlet works include the intake structure with hydraulically operated slide gates in the reservoir, a 36-inch diameter 481-foot long concrete jacketed steel outlet pipe under the main dam and a concrete outlet containing a stilling box and a weir.

1. If the existing outlet has adequate hydraulic capacity to meet emergency drawdown and expected operational requirements (based on the review of existing information from subtask 2.1.1, the ability of the existing outlet facilities

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to meet DSOD emergency drawdown requirements and District operating requirements) the Consultant shall inspect and perform a condition assessment of the Calero Reservoir outlet works

2. The Consultant shall inspect and evaluate replacement of the hydraulic system lines and related appurtenances at Calero Reservoir. The replacement options evaluated would keep the hydraulic lines away from contact with water. Some of these options may mean modifying the inlet structure to locate all valves and hydraulic lines from the reservoir so that their maintenance can occur without lowering the reservoir.
3. The Consultant will conduct a condition assessment using under water video for accessible submerged areas as well as Remote Operated Vehicles (ROV) for inspection of the outlet pipe. Prior to underwater or conduit inspections, Consultant and marine subcontractor will prepare a detailed work plan for the condition assessment in concert with District operations and maintenance staff; such plan will consider stream-flow maintenance requirements identified in the Dam Maintenance EIR, District operational and access procedures, and health and safety requirements.

Subtask 2.1.2.5—Assumptions

1. A 1-day dive inspection of the intake structure at Calero Dam to visually observe conditions and obtain video documentation and inspector observations of conditions at the intake structure. The dive inspection will be performed by a diver with experience doing underwater condition assessments of structural concrete and steel, and mechanical equipment.
2. A 1- to 2-day ROV inspection of the outlet conduit at Calero Dam using either: 1) in-the-dry inspection with the upstream gate closed and the downstream valve open, and using a track-mounted ROV inserted from the downstream end; or 2) in-the-wet inspection with the upstream gate open and the downstream valve closed, and using a neutral-buoyancy ROV inserted from the upstream end that can be “flown” down the pipe. The ROV will obtain video images and a real time narrative of observations by the inspector that are approximately registered along the length of the pipe by tether length. Depending on the size and capabilities of equipment that can access the pipe through the gates/valves, for the in-the-dry option, it may also be possible to gather supplemental quantitative data such as UT tests and or laser/sonar profile information to gather dimensional information about the pipe, sediment and any potential obstructions.
3. During dive and ROV inspections, District will provide pump-over of reservoir water during shutdown of the outlet works as needed to maintain minimum stream flows called for in the Dam Maintenance EIR.
4. District staff will open valves and remove pipe flanges/manways as necessary to insert and retrieve the ROV, and provide operation and lockout/tagout of gates valves as needed during the inspections.

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5. Hydraulic system inspections include: 1) inspection of the underwater hydraulic line/gate connections during dive inspections, 2) visual inspection of the upper connections at the control house and exposed conduits above the reservoir water levels, and 3) interview of operations staff to obtain anecdotal information about O&M procedures and past leakage issues and repairs.

Subtask 2.1.2.5—Deliverables

1. Section in Problem Definition Report detailing the assessment and evaluation.

Subtask 2.1.2.6—Perform Condition Assessment of Guadalupe Reservoir Outlet Pipe - Conditional

The outlet works consists of a 72-inch-diameter reinforced concrete intake tower housing a 48-inch-diameter corrugated steel riser, a low-level outlet pipe which is a 36-inch-diameter 720-foot long welded steel outlet pipe encased in concrete, and an outlet structure located at the downstream toe that includes a 30-inch butterfly valve used to control flow to Guadalupe Creek.

1. If the existing outlet has adequate hydraulic capacity to meet emergency drawdown and expected operational requirements (based on the review of existing information from subtask 2.1.1, the ability of the existing outlet facilities to meet DSOD emergency drawdown requirements and District operating requirements) the Consultant shall inspect and perform a condition assessment of the Guadalupe Reservoir outlet pipe.
2. Replacement of the intake structure and hydraulic lines is required due to the requirement to move the inlet structure away from the seismically deformed embankment footprint. The outlet structure will also need to be replaced as it will most likely be buried by the downstream buttress. Therefore only the outlet pipe will be inspected by Consultant.
3. Consultant will conduct the condition assessment using under water video for accessible submerged areas as well as ROV for inspection of the outlet pipe. Prior to underwater or conduit inspections, Consultant will prepare a detailed workplan for the condition assessment in concert with District operations and maintenance staff; such plan will consider stream-flow maintenance requirements identified in the Dam Maintenance EIR; District operational and access procedures; and health and safety requirements.

Subtask 2.1.2.6—Assumptions

1. A 1-day dive inspection of the intake structure at Guadalupe Dam to visually observe conditions and obtain video documentation and inspector observations of conditions at the intake structure, and possibly for positioning the ROV at the base of the inlet structure will be performed by Consultant. The dive inspection will be performed by a diver with experience doing underwater condition assessments of structural concrete and steel, and mechanical equipment.

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2. A 1- to 2-day ROV inspection of the outlet conduit at Guadalupe Dam using either: 1) in-the-dry inspection with the upstream gate closed and the downstream valve open, and using a track-mounted ROV inserted from the downstream end; or 2) in-the-wet inspection with the upstream gate open and the downstream valve closed, and using a neutral-buoyancy ROV inserted from the upstream end that can be "flowed" down the pipe will be performed by Consultant. The ROV will obtain video images and a real time narrative of observations by the inspector that are approximately registered along the length of the pipe by tether length. Depending on the size and capabilities of equipment that can access the pipe through the gates/valves, for the in-the-dry option, it may also be possible to gather supplemental quantitative data such as UT tests and or laser/sonar profile information to gather dimensional information about the pipe, sediment and any potential obstructions.
3. During dive and ROV inspections, District will provide pump-over of reservoir water during shutdown of the outlet works as needed to maintain minimum stream flows called for in the Dam Maintenance EIR. The District will also lower Guadalupe reservoir to provide a maximum water depth of 80-feet over the bottom of the intake structure. Also, District staff will open valves and remove pipe flanges/manways as necessary to insert and retrieve the ROV, and provide operation and lockout/tagout of gates valves as needed during the inspections.

Subtask 2.1.2.6—Deliverables

1. Section in Problem Definition Report detailing the assessment and evaluation.

Subtask 2.1.2.7—Inspect and Evaluate Upstream Concrete Slope Panels at Guadalupe Dam.

The Consultant will inspect and evaluate the condition of upstream concrete slope protection panels at Guadalupe Reservoir.

Subtask 2.1.2.7—Assumptions

1. Consultant's inspection of concrete panels will include visual inspection of panels exposed above the water line. No below-water inspection and no destructive testing will be performed.

Subtask 2.1.2.7—Deliverables

1. Section in Problem Definition Report detailing the assessment and evaluation.

Subtask 2.1.3—Prepare Problem Definition Report

- A. Based on information reviewed and collected in subtask 2.1, the Consultant will prepare a Problem Definition Report for each dam consistent with District QEMS guidelines. The Problem Definition Report will fully establish existing conditions, define the problems and causes, identify constraints and options, and Project Requirements. The Consultant will prepare a draft report, provide response to comments, and submit a final report.

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- B. The Consultant will assist the District in confirming stakeholder list; provide input on the strategic outreach to stakeholders plan (prepared by the District), and assist District in developing presentation materials and stakeholder meeting preparation.
- C. The Consultant will organize and conduct a Project Requirements Workshop with all stakeholders. The workshop will be combined with the Risk Management Workshop described in 2.1.3.D. The workshop scope and not-to-exceed fees are included in Subtask 1.4.
- D. The Consultant will prepare and submit a Project-Risk Management Plan for District's consideration and approval. The plan will identify the risks and recommend strategies for overcoming the risks. This subtask includes conducting a Risk Management Workshop during the Planning Phase to serve as the basis for a Risk Management Plan. The workshop scope and not-to-exceed fees are included in Subtask 1.4.

Subtask 2.1.3—Deliverables

- 1. Draft and Final Problem Definition Reports (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
- 2. Meeting materials (including stakeholder lists) and attendance at stakeholder outreach meeting run by District (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
- 3. Project Requirements Workshop and Risk Management Workshop.
- 4. Draft and Final Project-Risk Management Plan.

Subtask 2.2—Prepare Planning Study Report

The following subtask sections describe the Consultant's scope to complete the Planning Study Report.

Subtask 2.2.1—Develop Alternative Evaluation Methodology

Consultant will develop a model for use in screening and evaluation of conceptual and feasible alternatives. This task will rely on determination and confirmation of Project Objectives and Project Requirements and stakeholder interests and criteria determined under Subtask 2.1. Based on information received during stakeholder interviews, a model will be prepared and submitted by Consultant to the District for presentation and review. Following review of model algorithms, hierarchy, criteria, and measurement metrics, the model will be revised by Consultant based on comments received. The final model will be submitted by Consultant to the District.

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Subtask 2.2.1—Assumptions

1. Screening model will be an Excel-based spreadsheet that incorporates approximately 10 to 20 specific criteria that will serve as qualitative or quantitative metrics for evaluation of various alternatives. The model will allow independent weighting of criteria to reflect District and stakeholder priorities, as well as sensitivity testing of results based on different weighting factors. Model will allow comparison of alternatives using a total numerical score as well as a visual representation in a bar chart.
2. Subtask includes a combined 1/2-day workshop with District staff to review the draft model and proposed criteria and metrics, and agree on preliminary weighting factors for initial use in alternative comparison. The workshop scope and not-to-exceed fee is included in Subtask 1.4.

Subtask 2.2.1—Deliverables

1. Draft and Final Alternatives Evaluation Models (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam)

Subtask 2.2.2—Prepare Cost-Benefit Analysis (Guadalupe Dam Only)

The Guadalupe Dam retains one of the smaller capacity (3,460 acre-feet) reservoirs owned and operated by the District. The District seeks to determine if the anticipated expenditure of a seismic retrofit would be worth the realized benefits. The Consultant will, therefore, consider a range of alternatives for Guadalupe Dam to remediate the seismic deficiencies of the embankment. These will include a full retrofit, or a complete or partial dam removal. The Consultant will perform a cost benefit analysis (CBA) for the identified dam modification alternatives. The CBA will be a systematic process for calculating and comparing the benefits and costs of the various alternatives. The CBA analysis will be used to inform the conceptual alternatives process.

Subtask 2.2.2—Assumptions

1. Cost-benefit analysis will be prepared after conceptual alternatives have been identified under Subtask 2.2.3, Activity A.
2. The cost of various alternatives will be estimated by Consultant as part of conceptual evaluations performed under Subtask 2.2.3.
3. Consultant will work collaboratively with District to identify cost/benefit categories, and assign cost/benefit values for operational (e.g. water supply, O&M), intangible (e.g. flood protection, recreation, habitat, water quality) or/and other non-infrastructure items. Where possible, values will be estimated by applying established methodologies that rely on standard indices of costs of goods and services; where this is not possible, techniques used by federal agencies such as the U.S. Army Corps of Engineers and the Bureau of Reclamation will be applied to impute values through use of procedures such as shadow pricing. Federal guidelines for economic evaluation will also be used in determining parameters such as time horizons and discount rates to be applied in the CBA.

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Subtask 2.2.2—Deliverables

1. Draft and Final Technical Memorandum on Cost-Benefit Analysis (Guadalupe Dam).

Subtask 2.2.3—Prepare Feasible Alternatives Report

Sub-task 2.2.3 consists of Activities A through F as described below:

- A. Development of Conceptual Alternatives. The Consultant will develop conceptual-level designs for each conceptual alternatives along with a description of features and function. Level of development will be sufficient to allow initial screening for fatal flaws and initial comparison based on cost, implementability, operational and environmental considerations. The conceptual designs will identify general location, configuration, and size/operational features of major components, and identify significant uncertainties or technical feasibility issues that may exist in the alternative at this stage of design development. The configuration and key features will be illustrated by conceptual drawings or figures, with key Project data/quantities summarized in a concise, standardized table or narrative.
- B. Screening Evaluation of Conceptual Alternatives. The Consultant will evaluate the conceptual alternatives based on the initial screening criteria identified as part of the model development process (Subtask 2.2.1). The screening process for conceptual alternatives, however, will be less rigorous than the process that will be followed by Consultant for identification of the staff-recommended alternative. Consultant will assess the conceptual alternatives based on their ability to satisfy overall objectives and meet Project criteria. A weighted-criteria approach will be utilized by Consultant to screen the conceptual alternatives with close coordination and input from District. At the end of the screening process a number of feasible alternatives will be identified for further evaluation.
- C. Summary of Conceptual Alternatives. Following development and screening of the conceptual alternatives, the Consultant will prepare draft and final conceptual alternatives section of the Feasible Alternatives Report that includes screening rationale and initial identification of the array of feasible alternatives.
- D. Refinement of Feasible Alternatives. The Consultant will further refine the feasible alternatives identified under Activity B to allow for additional evaluation and identification of a staff-recommended alternative. Consultant will provide level of detail (designs 10% stage of Project definition) for the feasible alternatives sufficient enough to provide comparative analyses and support environmental compliance documents. Consultant's engineering analyses will be carried out to the extent that enables each feasible alternative to meet design and performance criteria. The criteria identified by Consultant during model development will clearly identify data requirements for alternative analyses, the level of detail for feasibility design, and prevent unnecessary efforts. The design is intended to allow designation of a preliminary footprint and construction requirements appropriate for consideration under CEQA, and provide a more refined estimate of Project costs and other features for use in final comparison of

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alternatives. The configuration and key features will be illustrated by drawings or figures, with key Project data/quantities summarized in a concise, standardized table or narrative.

- E. Comparison of Feasible Alternatives. The Consultant will update the previously developed decision model from Activity B with new metric information from the feasibility designs and review the model results and conduct sensitivity testing in a workshop with the District. Following completion of initial decision model analyses, Consultant will prepare a table (Feasible Alternatives Matrix) that summarizes the key features of each feasible alternative along with the relative score of each alternative along with the sub-score of each individual criterion.
- F. Feasible Alternatives Report. The Consultant will summarize the forgoing analysis and comparison of alternatives in a Feasible Alternatives Report that includes a discussion of the various alternatives and the methodology and assessment criteria used to compare the alternatives and presents the Feasible Alternatives Matrix. The Consultant will participate in a workshop with District staff and DSOD to review the draft Feasible Alternatives Report.

Subtask 2.2.3—Assumptions

- 1. Activity A includes development of up to 15 conceptual alternatives each for Calero and Guadalupe Reservoirs, with the alternatives based on the previously identified seismic remediation concepts for the dam embankments (5 at Calero and 4 at Guadalupe) combined with up to 2 or 3 outlet rehabilitation / replacement concepts, and 1 or 2 spillway modification concepts at each reservoir that may be possible depending on the embankment concept and the level of reservoir drawdown allowed for construction. Construction cost opinions developed under Activity A are considered commensurate with an Association for the Advancement of Cost Engineering (AACE) International Class 5 estimate.
- 2. Activity D includes development of up to 5 feasible alternatives each for Calero and Guadalupe Dams. Construction cost opinions developed under Activity D are considered commensurate with an AACE International Class 4 estimate.
- 3. Activity E includes two 1/2-day workshops with District staff (one for Calero and one for Guadalupe). The first part of each workshop will present/discuss the feasible designs for each alternative. The second part will review the preliminary decision model results for the feasible alternatives, and identify the need for any re-weighting of criteria, either for sensitivity testing, or for inclusion in the final model. Based on the modeling and sensitivity testing, it is expected that the Staff Recommended Alternative to be carried forward will be identified. The workshops scopes and not-to-exceed fees are included in Subtask 1.4.
- 4. Activity F includes two workshops meetings with the District and DSOD together (one for Calero and one for Guadalupe) to review the draft Feasible Alternatives Report before finalization. The workshops scopes and not-to-exceed fees are included in Subtask 1.4.

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Subtask 2.2.3—Deliverables

1. Draft and Final Feasible Alternatives Report (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
2. Two Feasible Alternatives Workshops with the District and DSOD together (one for Calero and one for Guadalupe).

Subtask 2.2.4—Develop Staff-Recommended Alternative

Following the identification of the staff-recommended alternative, Consultant will develop the alternative in more detail sufficient to develop a budget level cost estimate. The Consultant will prepare a narrative description and drawings of the staff recommended alternative that will be included as a section in the Planning Study Report. The narrative will describe the key design features, construction and operational requirements, preliminary engineering design criteria, construction cost for the alternative.

Subtask 2.2.4—Assumptions.

1. The staff-recommended alternative will be developed to a level of detail sufficient to prepare an opinion of probable construction cost commensurate with an AACE (Association for the Advancement of Cost Engineering) International Class 3 estimate.
2. Report section will include preliminary engineering design drawings (approximate 20% stage of design development) to illustrate the general configuration and typical sections/details of key components of the alternative sufficient to prepare budgetary cost estimates.

Subtask 2.2.4—Deliverables

1. Draft and Final Staff-Recommended Alternative section of the Planning Study Report (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 2.2.5—Prepare Planning Study Report

The Consultant will prepare a Planning Study Report that describes the Project background, objectives, problem definition, conceptual alternatives analysis, public outreach process, feasible alternatives analysis, staff-recommended alternative, and the basis for its selection. The staff-recommended alternative will be fully described in the report including life-cycle operation and maintenance guidelines and costs, real estate needs, estimated construction costs, schedule, and funding. Supporting calculations and preliminary engineering drawings for the staff recommended alternative prepared will be include as appendices. The Consultant will coordinate a meeting with District staff and the DSOD to review the draft Planning Study Report (PSR) prior to finalization.

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Subtask 2.2.5—Assumptions

1. The PSR body will include a summary of the previously prepared Problem Definition (PDR) and Feasible Alternatives Reports (FAR), with the PDR and FAR to be included as separate appendices.
2. This subtask included two workshops with the District and DSOD together (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam) to review the Draft Planning Study Report before finalization. The workshop scopes and not-to-exceed fees are included in subtask 1.4.

Subtask 2.2.5—Deliverables

1. Draft and Final Planning Study Reports (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
2. Two PSR Workshops with the District and DSOD together (one for Calero Dam (including fellows Dike) and one for Guadalupe Dam).

Subtask 2.2.6—Prepare Transition Reports

Consultant will prepare the Planning-to-Design Phase Transition Report to properly transfer Project information to the District. The Transition Report will provide all relevant Project information to the District so that decisions and requirements identified during the Planning Phase will be addressed as Project requirements in the Design Phase. This will assure design deliverables meet Planning Phase objectives, and assure Planning Phase activities are not duplicated during design. Consultant will prepare a draft and final Transition Report.

Subtask 2.2.6—Deliverables

1. Draft and Final Planning-to-Design Transition Report (one for Calero Dam including Fellows Dike) and one for Guadalupe Dam)

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TASK 3—ENVIRONMENTAL DOCUMENTATION AND PERMIT SUPPORT

1. The Consultant will prepare two Environmental Impact Reports (EIRs), one for Calero Dam and Fellows Dike (Elements E1 and E3) and another for Guadalupe Dam (Element E2) that comply with the requirements of the California Environmental Quality Act (CEQA) in a manner such that these documents may be presented to the District's Board of Directors as the CEQA Lead Agency, to enable them to certify the Final Environmental Impact Reports (EIRs) and adopt the Mitigation Monitoring and Reporting Plans (MMRPs). The Consultant will obtain the necessary environmental permits for construction of the Project, as well as permits/clearance needed for field investigations including supplemental geotechnical and borrow investigations.
2. The Consultant will support the District, in their role as the CEQA Lead Agency and primary contact with regulatory agencies for the Project. The regulatory agencies are as follows: State of California Department of Water Resources Division of Safety of Dams (DSOD), United States Army Corp of Engineers (USACE), United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW), the Valley Habitat Plan Implementing Entity and the County of Santa Clara (CSC). Under the direction of the District, Consultant will engage key agencies once sufficient Project design details exist, in order to formulate Project design alternatives that address agency concerns, and to develop appropriate CEQA mitigation measures consistent with the anticipated permitting requirements.
3. The Consultant may utilize a staggered scheduling of the two EIRs so that the Consultant may incorporate any applicable comments from the District on the first document into the second document prior to submitting it to the District.
4. The Consultant assumes that the Santa Clara Valley Habitat Conservation Plan (Valley HCP) will be operational, and impacts to upland species and habitat impacts will be permitted under the HCP. The Three Creeks Habitat Conservation Plan (Three Creeks HCP) is not expected to be operational in time for this Project, and impacts to fisheries will need be permitted under the traditional NMFS Section 7 process.
5. Costs for environmental tasks assume economies of scale and a staggered schedule for the two dam projects. Should either dam project be cancelled or substantially delayed, estimated costs for the active dam project will be up to 65 percent of the Task 3 cost for both dam projects.

Subtask 3.1—Develop Initial Regulatory and CEQA strategy, and coordination with regulatory agencies

1. The Consultant will inventory the regulatory permitting needs for the Project, and will work with the District to develop a strategy for pursuing regulatory approvals necessary for the design and schedule requirements of the Project.
2. Environmental permits or approvals for this Project are anticipated to include:
 - a. Individual Permits under Clean Water Act Section 404, administered by the U.S. Army Corps of Engineers.

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- b. Regional Water Quality Control Board authorization under Clean Water Act Section 401, as well as Waste Discharge Requirements pursuant to the State's Porter-Cologne Water Quality Control Act.
 - c. Approval from the California Department of Fish and Wildlife, including Streambed Alteration Agreements (Fish and Game Code Section 1602).
 - d. Biological Assessments for submittal to the National Marine Fisheries Service (NMFS) under Section 7 of the federal Endangered Species Act.
3. This task will result in production of Regulatory and CEQA Strategy Technical Memoranda which will outline the various requirements and develop a clear and comprehensive plan and timeline for addressing each.

Subtask 3.1—Assumptions

1. One in-person meeting with District staff and one phone-call with District Staff to discuss CEQA and regulatory lessons learned from the ongoing District projects at Anderson Dam and Almaden Dam, and consider the regulatory and CEQA strategy for the Project.
2. The strategy memorandum will be brief and summarize District and Consultant consensus on regulatory strategy.

Subtask 3.1—Deliverables

1. Draft Regulatory and CEQA Strategy Memoranda (one for Calero Dam (including Fellow's Dike) and one for Guadalupe Dam). (electronic)
2. Final Regulatory and CEQA Strategy Memoranda (one for Calero Dam (including Fellow's Dike) and one for Guadalupe Dam). (electronic and hardcopy)

Subtask 3.2—Perform Environmental Investigations and Studies

The Consultant shall perform investigations and studies needed to evaluate environmental impacts of the Project as required by CEQA and other applicable laws and regulations.

Subtask 3.2.1—Gather and Organize Environmental Information Relevant to the Project

1. Consultant will collect and review existing materials provided by the District as referenced in Attachment Four, Reference Materials, of this Appendix One. Consultant will work with the District to identify any other existing environmental data not provided in Attachment Four. In addition to this information, Consultant will gather other pertinent information from other sources, including:
 - a. The Santa Clara Valley Water District Dam Maintenance Program Final PEIR.

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- b. CEQA document for projects in the vicinity.
 - c. Planning documents including relevant general plans and/or master plans.
 - d. The Valley Habitat Plan.
 - e. Previous reports prepared by H.T. Harvey for District work in the Project area.
 - f. California Natural Diversity Database (CNDDB) occurrences from the Project vicinity.
 - g. Species occurrence data and status information compiled by the California Native Plant Society.
 - h. Water quality and sediment data from RWQCB reports and information used to develop TMDLs for the area.
 - i. A delineation of the Area of Potential Effects (APE) in consultation with Project engineers and the District. Consultant will conduct a record search of the APE at the Northwest Information Center of the California Historical Resources Information System (NWIC), and compile all documents pertaining to cultural resources identification and evaluation within the APE.
 - j. For information on potential hazardous materials sites, Consultant will utilize information provided by the District and a database search vender such as Environmental Data Resources Inc. (EDR) to provide data from a large number of databases and will investigate identified sites as needed.
2. Consultant will review the information gathered above and provide the District a list of additional environmental data needs and copies of information materials gathered (not originally provided by the District).

Subtask 3.2.1—Deliverables

- 1. Environmental data and documents for the Project (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
- 2. Lists of additional environmental data needs, (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

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Subtask 3.2.2—Prepare Base Map

1. Consultant shall prepare base maps for the Project areas. The maps shall be prepared in a Geographic Information System (GIS) format compatible with the District's GIS system; have an appropriate level of detail to serve as a basis for the analysis associated with Subtask 3.2.3, and subsequent environmental analysis; be constructed in a manner consistent with the protocol for information sharing of District's GIS department pursuant to Attachment Four, Reference # 19, District Standards for GIS Products; and be consistent with applicable metadata requirements.
2. The base maps will highlight previously mapped environmental resources in the Project areas. The base maps will serve as a platform for additional investigations and use in the CEQA analysis and permitting.

Subtask 3.2.2—Assumptions

1. The District will provide relevant existing and available GIS information currently in their possession.
2. Consultant will utilize existing GIS-compatible data; digitizing or creating new GIS data would require authorization of additional scope and costs by the District under Supplemental Services.
3. The base map will include the entirety of each reservoir and an approximate 2.5-mile wide buffer. Additional offsite areas, such as borrow sites or access roads outside of this buffer could be added as necessary through authorization under Supplemental Services.

Subtask 3.2.2—Deliverables

1. Base maps for Project (one for Calero Dam (including Fellow's Dike) and one for Guadalupe Dam) along with metadata.

Subtask 3.2.3—Summarize Environmental Conditions Based on Existing Data

1. Consultant will review existing reports, plans and policies and other information relevant to the Project, as identified in Subtask 3.2.1, including an assessment of environmental conditions as required by CEQA, the Migratory Bird Treaty Act, state and federal Endangered Species Acts, Clean Water Act, Porter Cologne Act, Fish and Game Code Section 1602, cultural and archaeological statutes, local ordinances, and air quality regulations.
2. Results of Consultant's analysis will be summarized by Consultant in CEQA and permitting documents. Brief memoranda will be produced which identify additional data requirements and environmental issues not previously identified. The memoranda will be submitted to District for review.

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Subtask 3.2.3—Deliverables

1. Brief Memoranda identifying additional data required and environmental issues not previously identified. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.2.4—Prepare Field Investigation Plan

1. Consultant will prepare separate field investigation plans for field studies pertaining to Calero (including Fellow's Dike) and Guadalupe Dams including identified borrow sources /sites and spoil disposal areas as described in Subtask 3.2.5.
2. Based on the data requirements identified under Subtask 3.2.2 and 3.2.3, Consultant will develop draft and final field investigation plans and submit them to District for review. Field investigations for the dams will include habitat surveys for sensitive biological resources, archeological surveys, baseline visual resources, and baseline traffic counts. The investigation plans will provide a description of the work to be conducted, locations, and approximate dates of field surveys, and methods to be used. In cases where equipment must be set up, such as for traffic counts, a drawing will be provided that illustrates approximate locations.

Subtask 3.2.4—Assumptions

1. Existing water and sediment quality data in reports gathered under Task 3.2.1 will be sufficient for CEQA and permitting purposes.
2. No additional baseline air quality data is required because ambient air quality data is available from local air monitoring stations operated by Bay Area Air Quality Management District (BAAQMD).

Subtask 3.2.4—Deliverables

1. Draft and Final Field Investigation Plans (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.2.5—Conduct Field Investigations

Field investigations will be conducted in accordance with the Final Field Investigations Plans reviewed by the District. Proposed field investigations are as follows:

A. Biological Resources

1. Biological field surveys for this task will gather the information needed for the EIR, permits, and other agency authorizations. Biological field surveys will consist of habitat assessments at each dam location, conducted by two biologists over a three-day period at each dam. Consultant will map and characterize habitats at a level suitable for the CEQA impact evaluation purposes and to satisfy the requirements of permitting through the Valley Habitat Plan. The habitat data will include the two Project

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components, including up to four proposed on-site borrow and/or spoil sites at each dam location.

2. The Consultant will evaluate the availability and potential suitability of existing habitats for special-status species. The dominant biotic communities of the Project area will be characterized based on dominant plant and associated wildlife and will be mapped on the base map developed in Task 3.2.2 (described above).

B. Jurisdictional Delineation

The Consultant will conduct field studies at each dam sufficient to identify potentially jurisdictional waters of the U.S. including wetlands, as well as waters of the state. A preliminary jurisdictional delineation will be prepared using the 2008 Corps Regulatory Guidance Letter, the 2007 Memorandum re: Clean Water Act (CWA) Jurisdiction Following U.S. Supreme Court Discussion in "Rapanos v. United States," the 2012 National Wetland Plant List, and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).

C. Cultural Resources

1. Consultant will conduct field surveys for archaeological and historic-era built environment resources within the Area of Potential Effect (APE), consisting of a pedestrian-level survey at each dam (including Fellows Dike for Calero Dam), and up to four (4) proposed on-site borrow areas and/or spoil sites at each dam location. Consultant proposed level of effort assumes that the existing documentation of historic-era resources at Fellows Dike is complete and will not require updates.
2. The Consultant will contact the State of California Native American Heritage Commission (NAHC), and individuals identified by the NAHC, in order to notify individuals with an interest or potential knowledge of cultural resources in the area.
3. All gathered data will be used by Consultant to compile a technical report adhering to Secretary of the Interior Guidelines, which can be used in support of CEQA and Section 106 documentation, and the acquisition of federal permits.

D. Aesthetics

The Consultant will conduct field visits to each dam to assess existing visual resource conditions in the Project area. The field visits will include an inventory, including photo documentation of the following existing conditions: viewpoints; notable visual resources; and vividness, intactness, and unity of the Project area. Photographs will be taken at the time to be used in the analysis and for graphics.

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E. Traffic

The Consultant will perform a field traffic assessment to qualitatively describe site conditions and will conduct daily traffic counts at up to five locations for each dam using machine traffic counting equipment.

F. Hazardous Materials

The Consultant will conduct a hazardous materials site database search for the Calero and Guadalupe Dams locations, using a vendor such as Environmental Data Resources, Inc. (EDR). After reviewing the database records, the Consultant will conduct a field visit to sites with known contamination that have the potential to be disturbed during construction to gather additional site-specific information.

Subtask 3.2.5—Assumptions

1. Noise surveys will not be performed. Consultant will assume noise typical for rural environments.
2. Simplified technical memoranda: Field notes will be typed for internal Consultant use, in sufficient detail to prepare primary regulatory documents (EIR and permits), but individual technical memoranda for each field investigation will not be provided to the District.
3. Existing mercury sampling data will be sufficient to meet regulatory requirements. Should preparation of a mercury sampling plan and field sampling for mercury be necessary, it will be conducted under a separate cost and scope as Supplemental Services.
4. Species-specific or protocol level surveys are not included in the scope for Task 3. If necessary for this Project, protocol level surveys for special status plants will be conducted under Task 6, Supplemental Services.
5. Suitable borrow material will be available on-site and surveys of potential borrow areas at an off-site or a distant location will be conducted under Task 6, Supplemental Services.
6. Fisheries field work is not included in the scope for Task 3. Consultant will rely on existing data from the District and others regarding fisheries resources within the Project area.
7. Existing hazardous materials data will be sufficient to meet regulatory requirements. Should preparation of a hazardous materials sampling plan and field sampling be necessary, it will be conducted under a separate cost and scope as Supplemental Services.

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Subtask 3.2.5—Deliverables

1. Technical Memoranda summarizing all field investigations, with major findings, implications for Project, fatal flaws, and outstanding data needs. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.3—Prepare Project Description And Initial Study Checklist (IS)

The purpose of this task is to accurately describe the elements of the proposed Project based on the Staff-Recommended Alternative and the Planning Study Report. The description of the proposed Project Components will be used in the environmental review process and to document the level of environmental review that will be undertaken to meet CEQA requirements through development of an Initial Study (IS) and Internal Decision Memorandum prepared by the District (IDM). The IS will also indicate resource areas requiring more detailed analysis and those areas that do not involve significant issues.

Subtask 3.3.1—Prepare Project Description

Consultant will work with District to produce draft and final detailed Project descriptions for each EIR for use in the CEQA process, based on the review and analyses conducted in the previous two tasks. Some elements of the proposed Project such as borrow areas, staging areas, haul routes, dewatering, stream flow bypasses, and access areas will also be described. The Project Descriptions will include descriptions of design for intakes, outlets, and spillways; description of surrounding areas influenced by the reservoir and flow releases; construction techniques and equipment to be used; and construction phasing for each dam and typical operation and maintenance requirements.

The Project descriptions will be subject to District review prior to completion of the final Project descriptions by Consultant.

Subtask 3.3.1—Deliverables

1. Draft and Final CEQA Project Descriptions. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam)

Subtask 3.3.2—Prepare Initial Study Checklist (IS)

The Initial Studies for each dam will be used by Consultant to determine issues requiring detailed analysis in the EIRs. The Checklist will be based on the current CEQA Appendix G checklist and District guidance. Consultant will provide brief supporting text to explain the basis for the conclusions identified in the checklist. The Consultant will also provide conceptual level information related to impacts and potential qualitative, early conceptual level mitigation.

Subtask 3.3.2—Assumptions

1. Once Final Project Descriptions are developed, there will be no subsequent substantive changes in Project designs and plans that would necessitate

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changes to the Project Description or substantively alter the scope of the environmental analysis.

2. The evaluation described in Task 3.4 below will focus on the potentially significant impacts identified in the IS checklist, or as appropriate, those raised during the scoping period.
3. The following resource topics will be dismissed from further consideration in the Initial Study (others may be eliminated as well): agricultural and forest resources, mineral resources, and population/housing.
4. The District will prepare the Internal Decision Memorandum as required by QEMS guidelines using information from this task.
5. Initial Study analyses will be qualitative. Substantive analyses, as needed, will be performed under Task 3.4.3.

Subtask 3.3.2—Deliverables

1. Draft Initial Studies (one for Calero (including Fellows Dike) and one for Guadalupe Dam)(electronic).
2. Final Initial Studies (one for Calero (including Fellows Dike) and one for Guadalupe Dam). (electronic).

Subtask 3.4—Prepare Draft Environmental Impact Report

Following completion of Task 3.3, development of Draft Environmental Impact Reports will be undertaken by Consultant. This task includes the steps to prepare two Draft EIRs, in addition to the Notices of Preparation to announce the upcoming environmental review, administrative drafts for District review and public drafts to be circulated for comment.

Subtask 3.4.1—Prepare Notice of Preparation

Consultant will prepare Notices of Preparation (NOP) for each dam to announce the upcoming environmental review and solicit public input on the scope and content of the EIR. The NOPs will include the IS's developed under Task 3.3, to inform public input regarding the environmental analysis. The two IS's developed under Task 3.3 above will be included with the NOP as an attachment, to help obtain public input regarding the impact topics to be included or dismissed from the EIR.

Subtask 3.4.1—Assumptions

1. District will provide an initial list of interested parties.
2. District will provide a mailing list for each dam.
3. District will distribute the NOPs.

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Subtask 3.4.1—Deliverables

1. Draft NOPs (electronic); Final NOPs (15 paper copies plus one electronic copy) (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).

Subtask 3.4.2—Conduct Environmental Scoping

1. In collaboration with District, Consultant will schedule and plan up to four public scoping meetings required by CEQA (two for each dam). At District's direction, Consultant will attend the meeting, answer questions, and solicit comments from the public and prepare detailed meeting notes. Consultant will prepare informational and presentation materials for the meeting. The location for the scoping meetings will be determined in consultation with the District Project Manager. Consultant will compile comments received at the scoping meeting and in response to the NOP and prepare a Scoping Summary Report.
2. Consultant will document and provide public comments to District.

Subtask 3.4.2—Assumptions

1. District will provide service to capture public comments.
2. Consultant will not provide a meeting transcript.
3. District will make meeting place arrangements, facilitate the meeting, and make the presentation.

Subtask 3.4.2—Deliverables

1. Draft and final public scoping meeting materials (paper and electronic) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam), scoping materials will include comment cards and up to two boards per dam.
2. Scoping Summary Reports (electronic) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.4.3—Prepare Administrative Draft EIR (ADEIR)

Consultant will prepare separate Administrative Draft EIRs for each dam including assessments of up to four (4) borrow and/or spoil areas for each dam. The ADEIR will incorporate the data and information collected and reviewed during previous tasks including Task 3.2, as well as comments submitted during the public scoping period. Technical analyses and impact assessments will be prepared using the impact topics and significance thresholds prescribed in Appendix G of the CEQA Guidelines, District input, and other applicable standards provided by the District. Only those impacts identified in the IS as a "potentially significant impact" will be evaluated in the ADEIRs. Appropriate mitigation measures will be identified for significant impacts, including the use of approved BMPs normally implemented by the District. Consultant will use mitigation measures developed for the Districts Dam Maintenance Program EIR to the

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extent that they are applicable to impacts of the Seismic Retrofit Project. Proposed borrow sites will be also assessed in the environmental analysis. The approaches to each of the environmental topics that Consultant will address in the EIR are described below.

A. Aesthetics

Consultant will describe the existing aesthetic conditions, including sensitive visual resources and sensitive visual receptors, and will analyze temporary aesthetic impacts from construction as well as long-term changes in aesthetic character. Consultant will use CEQA significance thresholds from the San Jose Envision 2040 visual resources policies and the County of Santa Clara's General Plan scenic resources policies to analyze impacts to aesthetic resources.

B. Air Quality/Greenhouse Gas

1. Consultant will analyze the potential significance of the Project's air quality and greenhouse gas emissions associated with Project construction. Each EIR will describe the existing air quality conditions of the Project area and San Francisco Bay Area Air Basin, the federal, state, and Bay Area Air Quality Management District regulations applicable to the Project, and the potential impacts from the Project's emission-generating activities. These activities include fuel combustion in construction equipment and fugitive dust generation during dam stabilization, breaching of Fellow's Dike, and borrow and spoils material transport.
2. Each EIR's impact analysis (prepared by the Consultant) will assess the significance of: 1) construction equipment emissions; 2) the health risks associated with the Project's emissions (i.e., carcinogenic and non-carcinogenic health risks); and 3) odors associated with the Project's emissions. The analysis would use methodologies consistent with the most recent guidelines available from the BAAQMD.
3. If necessary, the EIR (prepared by the Consultant) will acknowledge and disclose the potential for risks associated with airborne asbestos fibers or other contaminants associated with borrow area soils or dredge spoils, however, the EIR will not model or quantify the incremental risks associated with this impact because federal and state regulatory processes are in place to quantify and control the risks associated with this potential impact (e.g., BAAQMD Regulation 11, Rule 14 - Asbestos Containing Serpentine).
4. Consultant will prepare a discussion of the potential impacts associated with implementation of the proposed Project in the context of existing BAAQMD guidance. Consultant will use the 2011 CEQA thresholds to complete the air quality impact analysis as they still provide substantive thresholds for the analysis since there is substantive evidence for the use of these thresholds (BAAQMD CEQA Guidelines Update, Appendix D: Threshold of Significance Justification, May 2010).

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5. Greenhouse gas impact analyses (prepared by the Consultant) will be based on the construction traffic projections, as described below. The impact analysis will be completed by evaluating whether the Project will comply with state Assembly Bill (AB) 32 GHG goals, consistent with BAAQMD, however, since this is a construction-only Project, no long-term greenhouse gas impacts are expected.

C. Biological Resources

1. Consultant will use the information collected in Task 3.2 and experience on similar dam projects in the region to evaluate the biological resources in the ADEIR. The biological resource evaluations will address each of the components of the Project in the context of the biotic resources of the Project sites and vicinity and identify site-specific direct, indirect and cumulative impacts. Consultant will assess potential impacts to special-status species, sensitive habitats, as well as jurisdictional waters. This analysis will include an evaluation of the effects of reservoir dewatering and stream flow reductions on downstream fisheries habitats at Calero Dam and Guadalupe Dam. Consultant will evaluate impact significance using the thresholds provided in the CEQA Guidelines and the District's guidance.
2. Mitigation will be developed by the Consultant in coordination with the District to address potentially significant impacts of the Project on biotic resources on and off the Project site. Potential mitigation options to be evaluated will include avoiding the impact, minimizing the impact by decreasing the timing and locations of the proposed actions, restoring the biotic resource to its former condition after the impact has occurred, reducing or eliminating the impact over time by appropriate preservation and maintenance operations during the life of the Project, and/or compensating for the impact by replacing elsewhere those habitats or those biota that have been adversely affected.

D. Cultural Resources

Consultant will conduct a cultural resources evaluation for both dams in compliance with CEQA, NEPA, and Section 106 of the National Historic Preservation Act (Section 106). Consultant will use the results of recent cultural resources studies conducted within the Project areas and collected as part of Task 3.2—such as those in support of the Final Program Environmental Impact Report for the Santa Clara Valley Water District (SCVWD) Dam Maintenance Program—in order to assess Project effects, make mitigation recommendations, and make recommendations of eligibility for listing on the National Register of Historic Places (NRHP) and/or the California Register of Historical Resources (CRHR).

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E. Geology and Soils

Using prior site-specific knowledge and existing data, Consultant will analyze the Project's potential to expose people or structures to substantial adverse effects from the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides. Consultant will also address the potential for soil erosion and liquefaction, and will recommend mitigation measures to minimize the loss of topsoil and erosion during construction.

F. Hazards and Hazardous Materials

Consultant will evaluate potential threats to public health and safety from hazardous materials and other hazards that could result from Project construction. Consultant will review available environmental database reports collected under Task 3.2, describe the regulatory framework, and potential impacts from construction. Potential disturbance of existing hazardous materials/contamination sites located within the area of construction disturbance and 1/8 mile around construction disturbances will be evaluated.

G. Hydrology and Water Quality

Consultant will evaluate impacts to hydrology, flood control, and water quality, and in particular assess construction impacts on water quality and hydrology parameters, along with applicable federal, state, and local regulations. Consultant will evaluate potential water-quality impacts that could stem from reservoir dewatering, construction of cofferdams, and other in-water and near-water Project construction activities. Consultant will evaluate the potential for Project activities to expose or mobilize mercury (a greater concern at Guadalupe Reservoir), both during and following construction activities. Consultant will also prepare an analysis for potential bioaccumulation of contaminants resulting from aqueous mobilization due to drawdown, cofferdam, and in-water construction activities. This analysis will consist of a qualitative evaluation of the construction work relying on water and sediment contaminant data supplied by the District (if available) or otherwise publically available.

H. Noise

1. Noise and vibration impacts associated with the Project are anticipated to be limited to temporary noise from on-site construction activities and haul trucks traveling on local streets to and from the two dam locations. Consultant will describe in each EIR the existing noise and vibration environment of the Project area, identify sensitive receptors, and compare projected construction noise to local noise standards (i.e., County of Santa Clara and City of San Jose).
2. Consultant will, in each EIR, identify typical construction equipment sound levels, quantify peak and typical construction activity noise levels (including attenuation due to topography and ground cover), and, if necessary, identify best management practices or mitigation measures to

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reduce the magnitude of potential construction noise impacts, such as restricted work hours or blasting noise management plans if blasting is proposed.

I. Land Use and Planning

Although the Project would be exempt from local building and zoning ordinances under California Government Code Section 53091, Consultant will assess whether the Project would conflict with local land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect. The impact analysis will consider relevant policies from local jurisdictions including the City of San Jose General Plan and Zoning Ordinance, County of Santa Clara General Plan and Zoning Ordinance and County of Santa Clara Parks and Recreation Department policies (related to the breaching of Fellow's Dike).

J. Traffic and Transportation

The transportation analysis will focus on construction impacts only. Working with the Project engineers, Consultant will prepare Project trip and vehicle miles travelled (VMT) estimates including construction vehicles and workers. The VMT due to the Project will be used in modeling for air quality and greenhouse gas (GHG) emissions estimation in the EIR. Consultant studies will also evaluate site access and roadway systems near the dams in terms of roadway widths, curvatures, capacities, pavement strength, and integrity to identify appropriate access routes, seeking the least impact and shortest distance. Consultant will identify local roadways near the access points to the dam construction area that may experience short-term construction impacts in the section and will discuss potential delay on these roadways related to construction activities in terms of "time spent following" construction vehicles.

K. Recreation

Each EIR will contain an analysis of the relevant Project Component's impacts to recreational resources during Project construction and long-term operation of the dams and reservoirs once the retrofit Project is completed. Significance thresholds from the San Jose Envision 2040 Parks, Open Space and Recreation policies and the Santa Clara County General Plan recreation policies will be used to analyze impacts to recreation facilities.

L. Utilities and Service Systems

The primary function of Calero and Guadalupe Dams is to store and convey water supply. Construction of the proposed dam improvements may temporarily affect water supply availability and distribution, the impacts of which the Consultant will evaluate. Other public utilities, such as electricity, gas, stormwater, and wastewater facilities would not likely be affected. While the intent of the Project is to avoid alterations to public services such as police enforcement and fire protection, Consultant will evaluate the potential effects on

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these services. If necessary, Consultant will identify feasible and appropriate measures for avoiding or reducing impacts to public utilities and services.

M. Cumulative Impacts

1. Consultant will prepare a cumulative analysis for projects that may occur at the same time or near the Project vicinity. This may include other District dams such as Almaden or Anderson, depending on how construction schedules for those projects coincide with the construction schedules of the Guadalupe and Calero Project Components.
2. The documents will also contain sections on CEQA alternatives and other statutory considerations, including growth inducement or irreversible impacts, as well as lists of preparers and appropriate appendices.

Subtask 3.4.3—Assumptions

1. The study area for biological and cultural field surveys will be limited to the core Project areas, including Guadalupe Reservoir and Dam, Calero Reservoir and Dam (including Fellows Dike) and immediate environs. Surveys in additional Project areas outside the core areas such as off-site borrow areas, staging, disposal; water storage and release areas would require additional scope and not-to-exceed fees and may be performed as Supplemental Services.
2. Borrow areas will be identified on-site.
3. Land Cover Maps produced for the ADEIRs will be appropriate to meet the requirements of the Valley Habitat Plan application package in Task 3.7.
4. The District will provide a list of its concurrent projects to be analyzed for cumulative impacts. Consultant will contact County of Santa Clara for a list of other projects in the area to include in the cumulative analysis.
5. No visual simulation modeling will be needed, and photography of the existing areas will be sufficient to present the analysis of aesthetic impacts.
6. Consultant work effort does not include recreation counts, surveys, or outreach to the recreation community.
7. No field work or laboratory analysis is necessary to evaluate hydrology and water quality for this task.

Subtask 3.4.3—Deliverables

1. Ten (10) hard copies of each Administrative Draft EIR, one unbound hard copy; and electronic copies in PDF and MS Word formats (paper and electronic) (one set for Calero (including Fellow's Dike) and one set for Guadalupe Dam).

Subtask 3.4.4—Prepare Draft EIR

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Based on District comments provided to Consultant, Consultant will revise the Administrative Draft EIR(DEIR)s. The resulting document/s will be the Public Draft EIRs. District will review screen check copies of the Draft EIRs to ensure that comments have been incorporated prior to printing.

Subtask 3.4.4—Assumptions

1. One in-person meeting at the District's office or conference call for each DEIR to review District comments.
2. Hardcopy documents will be comb bound or in binders.

Subtask 3.4.4—Deliverables

1. Screen-check Draft EIR (3 paper and 1 electronic copy) (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).
2. 75 copies of the Public Draft EIRs (20 paper and 55 electronic copies on CDs), along with an unbound, reproducible copy. Electronic copies will be submitted on CD in both high resolution and low resolution versions (less than 4 MB), suitable for downloading from the District's website. The electronic copy will include separate files by chapter or resource section for ease of downloading. (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).

Subtask 3.5—CEQA Public Noticing and Participation Requirements

This task identifies the steps required for release and public review of the Draft Environmental Impact Report.

Subtask 3.5.1—Prepare Information for District Website and Filing Draft EIR with the State Clearinghouse

1. Consultant will prepare a Notice of Availability (NOA) for each dam for public mailing and posting on the Districts website. The NOAs will be developed in compliance with CEQA Guidelines Sections 15087 and 15105.
2. The Consultant will send the NOAs to the County of Santa Clara Clerk/Recorder for recording and all responsible and trustee agencies, and the State Clearinghouse. The NOAs will be mailed to the public by the District. The District will publish the NOA in a newspaper of general circulation consistent with District public outreach procedures.

Subtask 3.5.1—Assumptions

1. District will prepare and pay for newspaper advertisements.
2. District will distribute materials except as noted above.

Subtask 3.5.1—Deliverables

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1. Draft and Final NOA or publication on District website and State Clearinghouse filing. (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).
2. Newspaper advertisements, if these must be formatted differently from the NOA. (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).

Subtask 3.5.2—Prepare Notice of Completion for Filing with State Clearinghouse

In coordination with District, Consultant will prepare the Notice of Completion (NOC) that contains a brief Project description and location, address where the Draft EIR is available for public review, and the dates of the review period. The Consultant will submit the NOC to the State Clearinghouse, along with the NOA prepared under this Task to start the 45-day public review period in compliance with CEQA Guidelines Section 15085.

Subtask 3.5.2—Deliverables

1. Draft and Final NOC for Calero Dam (including Fellows Dike) and Guadalupe Dam.
2. State Clearinghouse filing materials for Calero Dam (including Fellows Dike) and Guadalupe Dam (15 CDs and 15 copies each of the Executive Summary).

Subtask 3.5.3—Prepare for and Attend Public Hearing

During the public comment period Consultant will support the District in preparing for public meetings or hearings for the District Board of Directors. Consultant will assist the District in presenting the Project, describe the CEQA process, and answer questions on the EIR from the Board of Directors and public. Consultant will record notes during the public meetings and hearings. As part of this task, Consultant will prepare meeting notices / announcements, public hearing and meeting displays, handouts, presentations in coordination with the District. Consultant will record written public comments during these hearings and meetings.

Subtask 3.5.3—Assumptions

1. One public meeting will be held for each dam EIR at a community facility near each project location. The District will handle arrangements for the meeting rooms and will facilitate the meetings and present the Project.
2. District will provide service to capture public comments.
3. Consultant will respond only to written comments submitted on the EIRs by mail or on comment cards at the meetings, or notes captured by the District.
4. Consultant will maximize use of master responses and will respond to up to 30 comment letters or 300 total comments per dam EIR.

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Subtask 3.5.3—Deliverables

1. Public Hearing Display Material (up to 4 presentation boards for each dam) (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).
2. Agenda(s) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
3. Presentation(s) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
4. Handouts (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
5. Public comment cards. (paper)
6. Meeting Notes (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam)

Subtask 3.5.4—Respond to Public Comments

After the close of the public comment period on the Draft EIRs, Consultant will review comment letters provided by the District and will prepare a numbered matrix of all public comments received. Consultant will assess whether they can address certain comments with "Master Responses." For comments that require individual responses, Consultant will prepare those as appropriate.

Subtask 3.5.4—Assumptions

1. One conference call for each dam EIR to discuss comment matrix and strategy to respond to comments.

Subtask 3.5.4—Deliverables

1. Draft Responses to Comments (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.6—Prepare Final Environmental Impact Report

Following completion of the public review process for the Draft EIR, the Final EIR will be completed by Consultant.

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Subtask 3.6.1—Prepare Final EIR

1. Based on the public comments and the Draft Response to Comments in Subtask 3.5.4, Consultant will prepare the Administrative Final EIR, incorporating public comments, responses to comments and content of the Draft EIR. The Administrative Final EIRs (AFEIR) for each dam will include copies of the comment letters received on the Public Draft EIR, a specific response to each comment (from revised (after District comments) Response to Comments Report), and any text edits to the Draft EIR as a result of public comments. Based on District comments, Consultant will revise the response to comments to develop a Final Response to Comments. The Final Response to Comments Report will be included in the Final EIRs.
2. The AFEIRs will also include the Mitigation, Monitoring, and Reporting Program (MMRP). Consultant will prepare Draft MMRPs for each dam in compliance with CEQA Guidelines Section 15097 and District QEMS guidelines. The MMRPs will incorporate the mitigation measures proposed in the Draft EIRs with information including, but not limited to responsibility for performing the measures, standards of performance, and the entity responsible for ensuring the mitigation is carried out as specified.
3. Consultant will complete the Final EIRs based on comments received from the District on the Screen Final EIRs. Preparation of the Final EIRs is assumed primarily related to document layout, format, and final editing.
4. A copy of the Final EIRs (on CD) will be provided by the Consultant to any public agency that submitted comments on the Public Draft EIRs and per CEQA Guidelines Section 15089(b), the Final EIR will be distributed to commenting agencies at least ten days prior to certification of the Final EIR.

Subtask 3.6.1—Assumptions

1. One in-person meeting at the District's office or conference call for each AFEIR to review District comments. The District will provide a set of consolidated comments on the Draft Response to Comments Reports with any discrepancies resolved.
2. Quantitative reanalysis to respond to Draft EIR comments and changes to the Project Description that require EIR updates between Draft and Final versions may be performed under to Task 6, Supplemental Services.

Subtask 3.6.1—Deliverables

1. Administrative Final EIRs with MMRPs - 10 hard copies, plus one unbound, reproducible copy, along with an electronic copy of each AFEIR in both PDF and MS Word format. (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).

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2. Screen Check Response to Comments on AFEIRs and MMRPs – 3 bound copies plus a CD with PDF and MS Word versions (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).
3. Final EIRs—20 hard copies, plus one unbound, reproducible copy, of the Final EIR for the District's internal use, reproduction, and distribution. Consultant will also produce PDF and MS Word versions of the document on CD. (one set for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam).

Subtask 3.6.2—Prepare Findings and Statement of Overriding Considerations

In coordination with the District, Consultant will prepare draft Findings for each Project Component for each significant impact, and a Statement of Overriding Consideration for significant impacts found to be unavoidable, if applicable, for the District's use in certifying the Final EIRs and approving the Project. The Statements of Overriding Considerations, if required, will express the District's reasons for approving a Project that would have significant, unavoidable impacts on the environment. The Statement of Overriding Considerations will be based on supporting evidence in the administrative record. Consultant will prepare the findings in compliance with CEQA Guidelines Section 21081 and 21081.5. Following review and comment of the draft Findings, Consultant will finalize the Findings for adoption.

Subtask 3.6.2—Deliverables

1. Draft and Final Findings and Statement of Overriding Considerations. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.6.3—Prepare Notice of Determination (NOD)

Consultant will prepare draft Notices of Determination for District review and filing once the Project has been approved by the District Board of Directors. Within 5 days of Project approval, Consultant will file the Notice of Determination with the County of Santa Clara clerk and mail it to anyone who requested a copy of the notice.

Subtask 3.6.3—Deliverables

1. Draft and Final Notice of Determination. (one for Calero Dam (including Fellows Dike) and one set for Guadalupe Dam)(electronic).

Subtask 3.6.4—Assist with Public Hearing and Certification of EIR

Consultant will provide support to District for the public meeting(s) or hearing(s) where the District Board of Directors considers the EIR for approval. Consultant (as needed) will attend the Board's meeting, as requested. Consultant will record notes of public comments during the meeting and provide those comments to the District.

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Subtask 3.6.4—Assumptions

1. Two hearings (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam) to be held at the District's boardroom. District will present Project to the Board.
2. No official transcription will be provided. Notes from the public meeting will be prepared for the District's review. Copies of all comments received in writing will be provided to the Consultant by the District.

Subtask 3.6.4—Deliverables

1. Public Hearing Displays, Handouts (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
2. Meeting notes from public meeting (hearing) (one for Calero Dam (including Fellows Dike) and one or Guadalupe Dam).

Subtask 3.7—Prepare Regulatory Permitting

The purpose of this task is for Consultant to produce permit applications, environmental documents and other supporting material needed for Project implementation. District will take the lead in negotiations with regulatory agency staff. Consultant will provide support with negotiations as noted below.

Subtask 3.7.1—Assist with Initial Regulatory Agency Consultation

Under the direction of District, Consultant will plan and participate in initial consultation(s) with regulatory agency personnel. Consultant will be responsible for keeping detailed notes of meeting(s).

Subtask 3.7.1—Assumptions

1. Up to two pre-application consultation meetings and two post application consultation meetings with regulatory agency personnel either at their offices in Santa Rosa, Sacramento or the San Francisco Bay Area.

Subtask 3.7.1—Deliverables

1. Initial Consultation Meeting Agenda and Notes. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam)

Subtask 3.7.2—Prepare Draft Permit Applications

1. In consultation with the District, Consultant will prepare draft permit applications for compliance with applicable regulations for the following agencies:
 - a. United States Army Corp of Engineers (USACE);
 - b. San Francisco Bay Regional Water Quality Control Board (RWQCB);

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- c. California Department of Fish and Wildlife (CDFW);
 - d. Valley Habitat Plan Implementing Entity.
2. For each application, Consultant will first prepare a draft version of the application for review by the District. Based on District comments, Consultant will revise the draft applications. Consultant will finalize the applications for submittal to the regulatory and local agencies under Task 3.7.5.
3. The Draft Permit Applications are listed below:

1. U.S. Army Corps of Engineers

The Project will require approval from the USACE under Section 404 of the federal Clean Water Act (CWA). An Individual Permit Application will be prepared for each Project Component (one for Calero Dam (including Fellow's Dike), and one for Guadalupe Dam) that will consist of the following:

- a. **Cover Letter.**
- b. **Engineer Form 4345, Application for Standard Permits.** This is the standard permit application form for USACE permits. The Jurisdictional Delineation conducted as part of Task 3.2 and the Project description utilized in the EIR, along with USACE discussions, will determine if the Project Component qualifies for authorization under an existing Nationwide Permit or if a USACE Individual Permit is required. Consultant assumes that USACE Individual Permits will be required for work at both dams due to the locations and types of work required upstream and downstream of the two dams.
- c. **404(b)(1) Alternatives analysis and Environmental Assessment** (if necessary). If an Individual Permit is required, Consultant will prepare the following supporting documents: 1) an alternatives analysis pursuant to CWA Section 404(b)(1), and 2) an analysis of compliance with the National Environmental Policy Act (NEPA). The alternatives analysis will identify the least environmentally damaging practicable alternative. These analyses are not necessary if the Project Component qualifies for authorization under a Nationwide Permit.
- d. **Mitigation and Monitoring Plan.** Consultant will utilize the Mitigation and Monitoring Plan (MMP) developed under Task 3.7.4 to support the USACE Application.
- e. **Public Notice** (if necessary). For each Individual Permit, Consultant will prepare a draft of the public notice for USACE's finalization and publishing in the Federal Register.

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f. **Jurisdictional Delineation and Biological Assessments.**

Consultant will utilize the Jurisdictional Delineation conducted as part of Task 3.2 to support this application. Consultant will prepare a Biological Assessment under Task 3.7.3 to support the USACE formal consultation with the National Marine Fisheries Services (NMFS). However, Consultant assumes that the requirements for formal consultation with the United States Fish and Wildlife Services (USFWS) will be minimal because the proposed Project is covered under the Valley Habitat Plan Section 10 Permit. Therefore, the USFWS Biological Assessment will consist of a brief letter summarizing compliance with the terms of the Section 10 permit.

g. **Cultural Resources Investigation for Section 106 Compliance.**

The background research and field studies under Task 3.2 will be used to prepare a Section 106 complaint cultural resource technical document required by the Corps in their 404 permitting process. In support of the 404 permit applications, Consultant will prepare a Draft and Final Finding of Effect (FOE) cover letter. The cover letter will briefly describe the Project and the Project activities that are subject to permitting. The FOE will describe any NRHP/CRHR-eligible resources potentially affected by the Project. Consultant will support the District's role to work with the federal Section 106 lead agency (USACE) in order to ensure appropriate consultation with Native American representatives and the State Office of Historic Preservation, successful compliance with Section 106, and issuance of federal permits.

Consultant will prepare a Memorandum of Agreement (MOA) prior to completion of the Section 106 process and issuance of the 404 permit per USACE and the State Historic Preservation Office (SHPO) requirements. It is anticipated that a Treatment Plan for the affected structures at Fellows Dike would be required prior to construction, but not necessary for 404 permit issuance. If required by the USACE for permit issuance, Consultant will prepare a Treatment Plan if authorized as a Supplemental Service.

2. San Francisco Bay Regional Water Quality Control Board

Both Components of the proposed Project will require authorizations from the San Francisco Bay RWQCB including a water quality certification (WQC) under Section 401 of the CWA and waste discharge requirements (WDR) under the state Porter-Cologne Water Quality Control Act.

Consultant will prepare the following items in support of the RWQCB permit applications for each Project Component (One for Calero Dam

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including Fellow's Dike and one for Guadalupe Dam):

- a. **Cover Letter.**
- b. **Form R2C502-E, Application for 401 WQC and/or Report of Waste Discharge.** This is the standard permit application form for RWQCB 401 WQC and/or WDR.

3. California Department of Fish and Wildlife

The proposed Project will require approval from CDFW pursuant to Fish and Game Code Section 1602 (Lake or Streambed Alteration Agreement [LSAA]).

Consultant will prepare the following items to support acquisition of a LSAA for each Project Component (One for Calero Dam including Fellow's Dike and one for Guadalupe Dam):

- a. **Cover Letter.**
- b. **Form FG2023, Notification of Lake or Streambed Alteration.** This is the standard permit application form for a Streambed Alteration Agreement.

4. Santa Clara Valley Habitat Conservation Plan Implementing Entity

Consultant anticipates that the Incidental Take Permits issued by USFWS and CDFW under the Valley Habitat Plan will be issued and available for use by the Project in accordance with the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) by the time this Task is started. The Valley Habitat Plan requires submittal of project-specific documentation to the Implementing Entity. The process for review and approval of the documentation has not yet been established and may be subject to change.

Consultant will use District's existing documentation of resources, and the habitat level studies scoped under Task 3.2, to evaluate potential impacts to biological resources within the Project area and vicinity to satisfy the Valley Habitat Plan species-specific survey. The conditions for the following biological resources will be addressed as appropriate:

- a. California red-legged frog, foothill yellow-legged frog, and western pond turtle
- b. Contra Costa goldfields
- c. Serpentine-endemic rare plants
- d. Bay checkerspot butterfly habitat
- e. Blue and valley oaks
- f. Western Burrowing Owl
- g. Least Bell's Vireo
- h. Tricolored Blackbird

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Consultant will prepare the following items in support of the Valley Habitat Plan Implementation Applications. One package will be prepared for each Project Component (One for Calero Dam including Fellow's Dike and one for Guadalupe Dam):

- a. **Cover Letter.**
- b. **Reservoir-Specific Dewatering Plan.**
- c. **Habitat Plan Application Package.** The Habitat Plan Application Package will include the following information as specified in the Valley Habitat Plan:
 - i. A description of the Project and a map showing the location;
 - ii. Documentation of existing land cover types in the Project area from District-provided information;
 - iii. A map of wetlands and other waters in the Project area;
 - iv. Results of species surveys previously conducted within the proposed Project region; and
 - v. Documentation of additional avoidance and minimization measures that will be implemented.

Subtask 3.7.2—Assumptions

1. USACE

- a. Project design changes following finalization of the HMMP may require revisions to the HMMP. If so, it may be conducted under Supplemental Services.
- b. Mitigation design plans and specifications are not included in the Consultant scope of work and may be conducted under Supplemental Services.
- c. The USACE will verify the preliminary jurisdictional determination based on the delineation conducted as part of Task 3.2. Typically, this is adequate for most projects evaluated by the USACE. If not adequate, preparation of additional materials required for an approved determination may be conducted under Task 6, Supplemental Services.
- d. Field delineations for waters and wetlands for upstream water storage opportunities or downstream water release locations are not included. However, Fellows Dike area is included.

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- e. For permitting purposes, a Treatment Plan for Historic Resources at Fellow's Dike is not required for Section 106 compliance. A Treatment Plan will be required prior to construction and may be prepared during final design.

2. RWQCB

- a. The preliminary jurisdictional delineation in Task 3.2 will identify waters of the state and the HMMP prepared for the USACE will contain elements required by the state and will be sufficient for the RWQCB review.
- b. Sediment and water quality data sufficient for RWQCB review and approval is available and will be provided by the District.

3. CDFW

- a. The HMMP prepared for the USACE will be prepared with enough content and detail to be sufficient for the CDFW review.
- b. The Jurisdictional Delineation submitted to the USACE will be acceptable to CDFW for waters of the state.

4. Valley Habitat Plan Implementing Entity

- a. Where the District is unable to supply data to meet the species-specific surveys, additional surveys may need to be performed under Task 6, Supplemental Services.
- b. USACE consultation with USFWS for Section 7 and/or additional agency review as required by the Valley Habitat Plan will be limited to USFWS review of the Habitat Plan Application Package and the Reservoir-Specific Dewatering Plan. No additional documents will be prepared.
- c. If preparation of a Project specific Biological Assessment for Section 7 consultation with the USFWS is determined to be required, it may be conducted under Task 6, Supplemental Services.

Subtask 3.7.2—Deliverables

- 1. Draft Permit Applications for each agency referenced in this subtask 3.7.2. (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam). Draft Permit Applications include:
 - a. USACE Section 404 Nationwide Permit Pre-construction Notification or Individual Permit Application.
 - b. San Francisco Bay RWQCQ 401 WQC/WDR Application.
 - c. CDFW LSAA Notification.

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- d. Valley Habitat Plan Implementation Application.

Subtask 3.7.3—Prepare NMFS Biological Assessment

1. In consultation with District, Consultant will prepare for District review the draft and final Biological Assessment (BA), as appropriate, for each dam to facilitate the USACE's formal Section 7 consultation with NMFS regarding potential Project impacts to listed fish species and critical habitat regulated by NMFS.
2. During or prior to preparation of the BAs, Consultant will participate in two meetings between the District and NMFS in order to review potential impacts of Project, related issues, avoidance and minimization measures, conservation measures and potential Project benefits to listed fish. Both Calero and Guadalupe Dams will be addressed within the two meetings.
3. Substantial existing information is available regarding the fisheries habitat associated with Calero and Guadalupe Creeks downstream of the two dams. The Consultant will utilize existing fisheries information to address the potential for the District's Project to result in "take" of the Central California Coast Steelhead DPS in Alamitos, Calero, and Guadalupe Creeks, as well as adverse modification of their habitat, as well as adverse effects on Essential Fish Habitat (EFH), as defined by Section 9 of the federal Endangered Species Act (ESA) and the EFH provisions of the Magnuson-Stevens Act.
4. Consultant will include the following in the BA :
 - a. Detailed analysis of direct, indirect, and cumulative effects of actions affecting waters of the United States, associated listed species, critical habitat, and selected Essential Fish Habitat (EFH) species (as applicable).
 - b. Review of downstream water release alternatives.
 - c. Identification of the potential for "take" of the Central California Coast Steelhead DPS, adverse modification of critical habitat, and adverse effects to EFH (as applicable), and avoidance and minimization measures.
 - d. Where appropriate, identification of additional actions that would assist in species conservation and are tied to tasks identified in recovery plans.
 - e. Description of monitoring and reporting programs.
 - f. Potential Project effects on the listed species, considering intensity, duration, frequency, and severity of actions.
5. Once complete and approved by the District, the Consultant will submit the BAs to USACE during the CWA Section 404 permitting process under Task 3.7.2. It is assumed that the USACE will then submit the BAs to NMFS for subsequent development of biological opinions (BOs).

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Subtask 3.7.3—Assumptions

1. Development of species specific conservation measures for California Central Coast steelhead would be developed under Task 6, Supplemental Services, if required.
2. The BAs will be based on the flow schedules currently utilized by the District or other flow schedules provided by the District.
3. Fisheries field work is not required.

Subtask 3.7.3—Deliverables

1. Draft and Final Biological Assessment (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.7.4—Prepare Habitat Mitigation and Monitoring Plan

1. Consultant will prepare a Draft Habitat Mitigation and Monitoring Plan (HMMP) separate from, but consistent with, the MMRP developed as part of the CEQA process. The final HMMP will be in the form of a report detailing mitigation plans, which will be sent to the resource agencies with the permit applications finalized in Subtask 3.7.5.
2. In the HMMP, the Consultant will identify measures that will be implemented to mitigate temporary and permanent impacts to biological resources resulting from the activities of the proposed Project. This will utilize, as needed, any Fish Rescue and Relocation Plan for each reservoir, and, Flow Maintenance Plan for each reservoir. These plans will be developed as needed, by the Consultant depending on the Staff- Recommended alternative/s. In the HMMP, the Consultant will identify timelines for the implementation of other wetland, waters, and fisheries mitigation defined in the CEQA document, responsible parties, reporting procedures, and other logistics, the frequency of occurrence, and performance standards, as necessary.
3. Consultant will develop a Final HMMP based on District comments on the Draft plan (one-round of comments).

Subtask 3.7.4—Assumptions

1. The HMMP will summarize proposed wetlands, waters, and fisheries mitigation developed in the permitting tasks (Subtask 3.7.1 and 3.7.2). This task will not include the development of additional mitigation design drawings or specifications.
2. Mitigation for Calero and Guadalupe Dams will be coordinated, so that impacts for both dams will be analyzed together, and proposed mitigation for both will be packaged to the extent allowed by regulatory agencies. Since Almaden Dam is also in the Guadalupe Watershed, coordination will be required with respect to aquatic habitat impact evaluation.

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3. Mitigation for upland species/habitats is available through purchase of conservation credits through the SCV HCP process and a detailed plan is not required for these species/habitats. If the HCP process is not in effect, a separate HMMP for upland species / habitats will be developed under Task 6, Supplemental Services.
4. Tree removal is exempt from the County of Santa Clara Tree Removal Ordinance.

Subtask 3.7.4—Deliverables

1. Draft and Final Habitat Mitigation and Monitoring Plan (HMMP) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

Subtask 3.7.5—Prepare Final Permit Applications

Based on the comments received from District, Consultant will prepare the final permit applications for the Project, which District will distribute, as appropriate. Consultant will submit, in one package, all technical information that went into the biological assessment and permit applications. This may include, but not be limited to, GIS files, vegetation or wildlife survey results, cultural, and resource data.

Subtask 3.7.5—Deliverables

1. Final Permit Applications (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam)

Subtask 3.7.6—Provide Support during Permit Negotiation

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

Subtask 3.7.6—Assumptions

1. Six (6), four-hour joint agency meetings in Santa Rosa, Sacramento, San Francisco, or District Offices.

Subtask 3.7.6—Deliverables

1. Negotiation meeting(s) material and displays (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
2. Attendance at negotiation meeting(s) (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).
3. Meeting Notes (one for Calero Dam (including Fellows Dike) and one for Guadalupe Dam).

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Subtask 3.7.7—Prepare Reservoir Dewatering Plans, Fish Rescue And Relocation Plans And Flow Maintenance Plans

1. The Consultant will prepare up to two reservoir-specific dewatering plans, one for each dam, as required under the Santa Clara Valley Habitat Conservation Plan (SCVHCP) and CEQA if dewatering is required for the preferred alternative. Each plan will cover the schedule and method of dewatering and will refer to both a Fish Rescue and Relocation Plan and a Flow Maintenance Plan to address potential impacts to fisheries resources within and downstream of the reservoir.
2. The Fish Rescue and Relocation Plan will be prepared according to the requirements of the SCVHCP and the requirements of CDFW for preparation of a 1602 Lake and Streambed Alteration Agreement for the proposed Project.
3. Consultant will utilize existing information to evaluate potential fish relocation needs at each reservoir. The Fish Rescue and Relocation Plan will address methods, personnel qualifications, schedule, and monitoring for proposed fish rescue activities. Consultant will coordinate agency contact with the District, as appropriate, to identify specific issues for fish rescue including relocation locations and strategies to address non-native, invasive species.
4. Consultant will develop a Construction Period Flow Maintenance Plan for the stream reaches located downstream of each dewatered reservoir. This plan will identify feasible measures that would be implemented by the District during construction to maintain minimum flows to maintain downstream fisheries habitats.

Subtask 3.7.7—Assumptions

1. This task will be based on existing flow and habitat data available to the Consultant.
2. District will provide available background information related to fisheries at the designated relocation sites.
3. Two meetings with District staff and agencies as appropriate to discuss measures incorporated into these plans.
4. Collection of field data, if required, would require a separate scope and cost estimate under Supplemental Services.

Subtask 3.7.7—Deliverables

1. Draft and Final Reservoir Dewatering and Fish Rescue Plan.
2. Draft and Final Flow Maintenance Plan.

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TASK 4—DEVELOP ON-SITE BORROW AND SPOIL REQUIREMENTS

The Planning Study Report will include an assessment of potential borrow and spoil disposal sites at Calero and Guadalupe dams. Consultant will identify on-site quarry/quarries and on-site spoil disposal/stockpile areas for both dams, starting during the planning phase to allow permits to be obtained commensurate with certification of the environmental documents.

1. Borrow Sites

The dam retrofit (buttressing) alternatives, as documented in the previously prepared Seismic Stability Evaluation reports, will require several hundred thousand cubic yards of material (borrow) that will need to meet certain density and gradation requirements. Preliminary quantity estimates indicate up to 225,000 cubic yards at Calero Dam and 135,000 cubic yards at Guadalupe Dam (subject to confirmation based on further engineering analysis) will be needed.

2. Spoil Disposal Sites

Downstream buttressing options will require removal of soils and weathered rock to suitable foundation material and will need to be spoiled on-site. In addition, inlet and outlet improvements including tunneling (or other) work will generate spoils that require disposal on or off-site.

The borrow and spoil evaluation will include the following subtasks with a goal of a two-step process that allows the results from Subtask 4.1 to inform the scope and direction of Subtask 4.2.

Subtask 4.1—Conduct a Borrow and Spoil Siting and Suitability Study

1. To assess potential rock and general embankment fill borrow areas, the Consultant will perform the following Activities A through G, for Calero and Guadalupe Dam / Reservoirs:
 - A. Evaluate the preliminary quantities and quality of borrow needed for the alternatives
 - B. Assess potential staging areas for material handling for the Project alternatives.
 - C. Review available on-site and regional information to identify candidate on-site borrow sources, stockpile and spoil disposal areas at the reservoirs.
 - D. Develop screening criteria to prioritize candidate on-site borrow and spoil locations based on environmental, accessibility, and engineering considerations.
 - E. Conduct a meeting with the District to screen the borrow source and spoil disposal areas to select sites for field reconnaissance level studies.

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- F. Perform a geologic field reconnaissance of potential borrow areas by an engineering geologist from the Consultant. The goals of the reconnaissance will be to: a) confirm/define the limits of rock types potentially useful and b) categorize rock exposures within these limits according to a four-class ranking (A through D) that takes into account rock strength, rock hardness, and degree of weathering. Observations made during the geologic reconnaissance will be documented on a field geologic map and photographs will be taken of each area.
 - G. Perform a geotechnical reconnaissance of potential borrow and spoils disposal areas by a geotechnical engineer and environmental specialists from the Consultant. The goals of the spoils disposal reconnaissance will be to: a) review the apparent geotechnical conditions at each location; b) assess the potential slope stability and erosion impacts at each location; c) assess the sites from an environmental impact perspective. Observations made during the reconnaissance will be documented on a field map and photographs of each site will be taken and catalogued.
- 2. The desktop and field reconnaissance studies will be documented by the Consultant in a draft and final Borrow and Spoil Siting Technical Memorandum. The Technical Memorandum will provide a summary of the findings of the Task 4.1 activities and present recommendations for a preferred on-site borrow and spoil site for Task 4.2 studies.

Subtask 4.1—Assumptions

- 1. On-site borrow and/or spoil sites are assumed.
- 2. The geologic, geotechnical and environmental reconnaissance will be conducted in four days (two days per reservoir location).
- 3. The Consultant will conduct up to two meetings with the District to screen candidate sites for the Task 4.1 reconnaissance, and then select preferred borrow and spoil site/s for Task 4.2 studies
- 4. Field reconnaissance will be performed at up to four (4) total borrow and/or spoil sites for each reservoir location.
- 5. Up to four (4) borrow and/or spoil sites will be identified for each reservoir for Task 4.2 studies.
- 6. One consolidated set of District comments will be incorporated into the Borrow and Spoil Siting memorandum to finalize the draft document.

Subtask 4.1—Deliverables

- 1. Draft and Final Technical Memorandum on Borrow Sites and Spoil Disposal Areas (one for Calero Dam and one for Guadalupe Dam).

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Subtask 4.2—Identify Preferred Borrow and Spoil Sites

The Consultant will develop a footprint of borrow and spoil site disturbance areas to be used in the preparation of the Staff-Recommended alternative for preliminary design. The Consultant will also provide initial design parameters to allow the design phase consultant to prepare plans and specifications, and allow early consultation for potential permits.

Task 4.2 Activities will include the following:

- A. Preparation of a geotechnical work plan addressing the following elements:
 - 1. Proposed types of exploration (test pit, boring, or seismic velocity survey).
 - 2. Specific purpose of each exploration.
 - 3. Location, size, depth, and means of completing each exploration.
 - 4. Means of accessing the location where the exploration will be completed, along with any necessary right of entry protocols.
 - 5. Identification of the excavation, drilling, and/or other subcontractors who will execute the exploration work, including proof of insurance and appropriate licensing.
 - 6. Identification of the professionals from the Consultant team who will manage and undertake the exploration work.
 - 7. Means of clearing the proposed exploration locations for underground utilities/improvements.
 - 8. Permitting needs specific to the exploration activities (including CEQA, as applicable). This will include depiction of exploration footprints, staging and laydown areas and access routes on site plans to assist with environmental clearances and right of entry permits.
 - 9. Environmental monitoring needs during the exploration.
 - 10. Site restoration requirements.
- B. Perform a geotechnical exploration program including 6 borings up to 40 feet in depth, 20 excavation pits up to 15 feet in depth, and 4 seismic refraction lines with a total length of up to 2,000 feet (combined for both reservoir sites).
- C. Perform a geotechnical laboratory testing program to characterize suitability of borrow materials, and determine whether the sites will yield suitable materials based on anticipated excavation volumes, requirements for new fills, and shrink/swell factors. Spoil sites will also be characterized to determine geotechnical suitability for receiving either temporary stockpile materials or permanent spoils and waste rock from processing.

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- D. Perform preliminary engineering evaluation using geotechnical field and laboratory data to develop the following:
1. An initial estimate of rock production (usable vs. wastage).
 2. Identification of the depth to competent material, its density, and initial range of suitable gradation needed for buttressing that could affect the size or footprint of disturbance that will need to be evaluated under CEQA.
 3. Identification of the presence of any large-scale subsurface variations that may affect the size of the quarry site to confirm the suitability of the preferred site or adverse geotechnical conditions to assist the District in selecting other sources of borrow.
- E. Develop maps as part of a preliminary borrow and spoil plan. These maps will be developed using available County of Santa Clara Light Detection and Ranging (LIDAR) data files (or District files, if available) to create AutoCAD Civil 3D files that will allow for readily estimating the amount of land needed for a) topsoil spoil; b) rock processing and stockpiling areas; c) proposed haul roads to/from the dams; and d) proximity to local communities and species of concern that may be affected by the noise (blasting, rock processing, & trucks), dust, lighting associated night-time work, etc.).
- F. Evaluate the preferred borrow and spoil sites for potential cultural or paleontological impacts. This work will be incorporated into the proposed borrow plan to avoid critical sites and minimize other impacts to obtain an environmentally permissible approach.
- G. Prepare a Technical Memorandum summarizing the findings of the borrow and spoil siting suitability study for the activities described above, including a presentation of excavation, grading and restoration plans, test pit and boring logs, and laboratory test results, and findings of the preliminary engineering evaluation.

Subtask 4.2—Assumptions

1. This Scope of Services is limited to the pre-feasibility through feasibility-level of analysis.
2. Test pit, boring, and seismic refraction survey exploration progress dependent upon terrain and environmental monitoring requirements.
3. The on-site studies will be conducted at up to two (2) borrow and/or spoil / staging locations per reservoir location.
4. The construction and subsequent restoration of haul roads will not be necessary to conduct geotechnical explorations.
5. Geotechnical exploration will be conducted on District property only.

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6. The Consultant will perform the exploration work in accordance with the best management practices described in the District's approved Dam Maintenance EIR.
7. Consultant will design the geotechnical studies with the goal of avoiding impacts through the proper timing and placement of study locations. Consultant will attempt to design the studies to avoid impacts to wetlands, sensitive species habitat, and cultural resources sites and include avoidance and minimization measures such as pre-study surveys to avoid impacts. If impacts can be avoided, it is assumed that the work can be conducted under a CEQA Section 15306 (Class 6) Categorical Exemption for information collection and Consultant will prepare Categorical Exemption documentation under Task 2.1.2.7 using District guidance for their preferred format. If impacts cannot be reasonably avoided then Consultant will prepare a brief Initial Study and Negative Declaration or Mitigated Negative Declaration to satisfy CEQA requirements as described under Supplemental Services Task 6.7.
8. Hazardous materials testing and disposal will not be necessary at exploration locations.
9. Dredging associated with work upstream of Guadalupe Dam may contain trace amounts of mercury that will need to be addressed. Sampling immediately in advance of dredging could allow non-hazardous soils to be disposed of on-site while soils deemed hazardous would need to be disposed of at an approved off-site location. No over-water exploration work or environmental sampling and testing is included in the Task 4 Scope of Services. If such services are needed, they would be performed under Task 6 Supplemental Services.
10. Two preliminary excavation, haul road grading and restoration plans (one per each reservoir location) will be prepared for the borrow areas for use in planning-level mass balance estimates for the sites. These plans will be included in the Report documenting Footprint of Disturbance (See Task 4.2 Deliverables).
11. One consolidated set of District comments will be incorporated into the Geotechnical Work Plan, Feasibility Level Geotechnical Study, and Documentation of Footprint Disturbances to finalize the draft documents.

Subtask 4.2—Deliverables

1. Draft and Final Geotechnical Study of Preferred Borrow (Quarry) Site/s (one for Calero Dam and one for Guadalupe Dam).
2. Draft and Final Report documenting the Footprint of Disturbance associated with the preferred borrow and spoil sites (one for Calero Dam and one for Guadalupe Dam).

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TASK 5—DESIGN SUPPORT

In a supportive role, the Consultant will be responsible for reviewing the design consultant's work for consistency with the planning assumptions and requirements (Design Review). The Design Review is not meant to replace or absolve the Engineer of Record of its roles and responsibilities relative to the design. It is understood that the Engineer of Record assumes full responsibility for the design.

Subtask 5.1—Review of 30% Design Deliverables

1. Consultant will meet with the District and design consultant to receive 30% design deliverables and discuss design progress, considerations, and challenges. Consultant will perform a comprehensive review of plans, specifications, and cost estimates; and provide comments and recommendations in a 30% Design Review Memorandum. It is assumed that 30% design documents will include outline specifications and minimally developed details.

Subtask 5.1—Deliverables

1. Draft and Final 30% Design Review Memorandum.

Subtask 5.2—Review of 60% Design Deliverables

1. Consultant will meet with the District and design consultant to receive 60% design deliverables and discuss design progress, considerations, and challenges. Consultant will prepare a comprehensive review of plans, specifications, and cost estimates; and provide comments and recommendations in a 60% Design Review Memorandum. It is assumed that 60% design documents will include first draft complete specifications and substantially developed details.

Subtask 5.2—Deliverables

1. Draft and Final 60% Design Review Memorandum.

Subtask 5.3—Review of 90% Design Deliverables

1. Consultant will meet with the District and design consultant to receive 90% design deliverables and discuss design progress, considerations, and challenges. Consultant will perform a comprehensive review of plans, specifications, and cost estimates; and provide comments and recommendations in a 90% Design Review Memorandum. It is assumed that 90% design documents will be considered "bid ready."

Subtask 5.3—Deliverables

1. Draft and Final 90% Design Review Memorandum.

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TASK 6—SUPPLEMENTAL SERVICES

The District may require, and Consultant will perform, Supplemental Services during the Agreement term on an as-needed basis. Prior to performing any Supplemental Service, Consultant will obtain written authorization in the form of a Task Order (see Attachment Three - Task Order Template) approved by the District's Water Utility Capital Division Deputy Operating Officer (DOO).

- A. Details of the specific scope, deliverable, schedule, and fees for any Supplemental Services will be developed with the District and submitted in writing prior to approval to begin work.
- B. The Not-To-Exceed Fees for each Supplemental Services Task Order will be based upon the Hourly Rate Schedule (time and material) as described in Appendix Two, Fees and Payments, of this Agreement, and must include all of the following information:
 - 1. The agreed upon scope of services requested by the District,
 - 2. The total not-to-exceed amount for Consultant to complete the Supplemental Services Task Order on a Time and Materials basis,
 - 3. The schedule for completing the Supplemental Services Task Order; and
 - 4. Consultant key staff and classifications that will be assigned to complete the Supplemental Services.
- C. The Supplemental Services Task Order fees will not be exceeded by Consultant without prior written authorization from the District's Water Utility Division DOO.
- D. Under no circumstances will Consultant commence the Supplemental Services until:
 - a. The Supplemental Services Task Order is received, reviewed, and executed by the District's Water Utility Division DOO; and
 - b. The Consultant receives a Task Order Notice-To-Proceed from the District's Project Manager.
- E. The Consultant will perform, based on District approval, the following Supplemental Services:

Task 6.1—Implement Value Engineering / Constructability Review

Consultant will perform Value Engineering (VE) and Constructability reviews according to the following subtasks.

Subtask 6.1.1—Arrange and Conduct Value Engineering (V E) Sessions

Value Engineering (VE) studies will be used to compare conceptual designs by evaluating their comparative economic advantages and disadvantages in addressing

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seismic retrofit issues, PMF issues and inlet/outlet issues. Consultant will include early cost benefit analysis using a one-page high-low business case model for each of the ideas formulated to address potential failure modes and remedial alternatives. The Consultant will:

- a. Conduct a feasibility-level VE session of the proposed retrofit scope of work during the Planning Phase.
- b. Provide Certified Value Engineering Specialist or Associated Value Engineering Specialist as Value Engineering team leader.
- c. Provide necessary design disciplines and cost estimator/scheduler.
- d. Include operability and maintainability assessments.
- e. Prepare draft and final Value Engineering Report.
- f. Identify strategies for accelerating the Project's completion.

Subtask 6.1.1—Assumptions

1. The anticipated not-to-exceed fee includes preparation of one page business case evaluation for ideas early-on, which will assist the Project team in developing conceptual designs that will accelerate the Project's completion.
2. The anticipated not-to-exceed fee also assumes that the VE workshop for each dam will consist of a 4-day workshop located at a District-provided facility, with the Consultant providing 3 technical discipline staff in addition to the VE Team Leader and a cost estimator/scheduler.
3. District will provide a participant familiar with the site issues and with operation and maintenance of each dam, as well as its integration into District water delivery facilities.

Subtask 6.1.1—Minimum Deliverables

1. Value Engineering session.
2. Value Engineering Draft and Final Report.

Subtask 6.1.2—Arrange and Conduct Constructability Reviews

Calero Dam and Guadalupe Dam each have challenging operational, engineering and permitting needs, and separate constructability reviews will be performed for each. The Consultant will arrange for and conduct feasibility-level constructability reviews and prepare a Constructability Review Memorandum for each dam and submit for District's consideration and approval. The constructability review sessions will lay out the proposed designs, construction sequence, relationship between construction activities and the construction methodology envisioned for retrofits to the dams and include the effects of potential CEQA permitting constraints that may limit some construction techniques. The construction challenges identified will be outlined to the engineering

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team, estimator/scheduler, environmental planners, and District operations staff and their input will be included in the Constructability Review Memorandum. The constructability review will also take into account the risk management strategy to refine construction sequences and methods in order to minimize the potential for disruption of reservoir during construction.

Prior to the constructability review sessions, the Consultant will prepare an agenda for review and approval by the District that includes session purpose and goals, summary of key issues and timing of key segments planned for the sessions.

Subtask 6.1.2—Assumptions

1. The constructability review workshops will be performed after refinement of Feasible Alternatives under Subtask 2.2.3 but prior to identification of the Staff Recommended Alternative in Subtask 2.2.4, when design concepts have been developed to approximately the 10% stage of design development.

Subtask 6.1.2—Minimum Deliverables

1. Constructability review session.
2. Constructability Review Memorandum.

Task 6.2—Additional Geotechnical Investigations

1. Consultant will perform additional geotechnical investigations if site conditions warrant additional data needs. Recommendations will include a draft scope of services and draft sampling plan, rationale for the additional services, fees, and schedule of completion. Additional geotechnical investigation may include but not limited to:
 - a. Design of Seepage monitoring, collection and disposal at Calero Dam.
 - b. Calero Dam site.
 - c. Guadalupe Dam site.
 - d. Potential new tunnel outlet for the two dams.
 - e. Potential new weir.
 - f. Spillway modifications.
 - g. Borrow site investigations.
2. Identified Seepage Areas at Calero Dam: Based on the recommendations provided in the Calero Main Dam Forensic Geologic Report (Forensic Report) subsurface exploration consisting of rotary borings in foundation and embankment areas may be considered. Areas of exploration may include the right abutment foundation, embankment and downstream left toe seepage areas. Recommendations for additional subsurface exploration will be made, if any, after Consultant's site reconnaissance and seepage evaluation studies as described in Section 2.1.2.3.
3. Calero and Guadalupe Dam sites: The earthfill buttress alternatives for Calero and Guadalupe Dams would result in new embankments extending outside the current dam footprints. As scoped in Task 2.1.2.2 three (3) borings per dam site are planned near the toe of Calero Dam and Guadalupe Dam to provide information on stratigraphy and assist with preliminary estimates of foundation excavation extents and quantities for a given

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alternative. Additional explorations beyond those scoped in Task 2.1.2.2, if determined necessary, will be performed under this Task 6 Supplemental Services.

4. **Potential New Tunnel Outlets and Weir and Spillway Modifications:** The existing geotechnical and geologic studies of the Guadalupe and Calero sites may be sufficient to characterize tunnel outlet alignments for the development and screening of conceptual alternatives. However, geophysical surveys at tunnel outlet and spillway areas could further characterize subsurface conditions, could be used to determine candidate locations for future explorations once the configurations of the preferred alternatives are better defined, and would be relatively economical to perform while planning concepts and footprints are under development. The geophysical data can also be integrated with existing and future geotechnical and geologic data.
5. Geophysical studies would consist of seismic refraction surveys in overland areas of the outlet alignments, and in weirs and spillway areas to determine the depth of alluvial or colluvial materials. The Consultant will analyze the results from the seismic refraction surveys and geologic mapping in conjunction with established criteria to evaluate the relative rippability and excavatability of harder rock units in spillway, weir, and outlet areas.

Task 6.2—Assumptions

1. Consultant anticipated not-to-exceed fees for this subtask 6.2 includes costs for preparation of additional exploration workplan, drilling permits, mobilization/demobilization of field exploration equipment, 6 days of exploration, (generally equivalent to one 80-foot boring or two 40-foot borings per day), obtaining samples of soil and rock, logging of borings, clean up and grouting of boreholes, nominal physical laboratory testing on samples, and providing final boring logs with descriptions of soil and rock encountered and laboratory test results.
2. Consultant anticipated not-to-exceed fees for this subtask 6.2 includes two days of seismic refraction surveys.
3. The anticipated scope of services for this subtask 6.2 is limited to the pre-feasibility through feasibility-level of analysis.
4. The construction and subsequent restoration of access roads will not be necessary to conduct geotechnical explorations.
5. Geotechnical exploration will be conducted on District property only.
6. The Consultant will perform the exploration work in accordance with the best management practices described in the District's approved Dam Maintenance EIR.
7. Any necessary CEQA documentation /permitting will be limited to preparation of Categorical Exemptions, Negative Declarations or Mitigated Negative Declarations.
8. Hazardous materials testing and disposal will not be necessary at exploration locations.

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Task 6.2—Minimum Deliverables

1. Draft and Final Reports (Various).

Task 6.3—County Of Santa Clara Permit Application

Construction of the Project and property acquisition will require permits/authorizations from the County of Santa Clara (County) to ensure consistency with County's planning, zoning, building, and public works regulations. If requested by the District, Consultant will assist the District in obtaining permits/authorizations from the County. Consultant will prepare a permit application package for compliance with the County for Calero and/or Guadalupe Dams.

Consultant will prepare the following items in support of the permit applications:

- a. Determine the need for permits/authorizations based on engineering specifications and County Requirements.
- b. Draft and Final Cover Letter. The cover letter will briefly describe the Project and the Project activities that are subject to permitting. The cover letter will describe the contents of the permit application binder.
- c. Draft and final County Permit Application Forms.

Task 6.3—Assumptions

1. The level of effort to support this supplemental service is assumed to be 100 hours per dam.

Task 6.3—Minimum Deliverables

1. Draft and Final Cover Letter.
2. Draft and Final County Planning, Building, and Public Works Permit Application Forms.

Task 6.4—Tree Removal Permits

Construction of the Project may require impacts to trees protected by County ordinances. For each dam, The Consultant will determine the need for a County Tree Removal Permit, and, as needed, conduct a tree survey, consult with the County on appropriate revegetation, prepare a revegetation plan, and prepare a County tree removal permit for Calero and/or Guadalupe Reservoirs. Tree impacts may also need to be addressed in an Encroachment Permit from the County Department of Roads and Airports. If riparian trees are impacted, riparian tree impacts will need to be addressed for CDFW. Finally, impacts to oak woodlands are anticipated and will need to be addressed under the California Public Resources Code 20183.4, the Oak Woodland Conservation Act. Impacts to oak woodlands will need to be evaluated (significance, mitigation measures) as part of the environmental analysis for CEQA.

Task 6.4—Assumptions

1. Four, 2-hour phone calls with the County.

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2. Tree surveys at additional Project sites would require a separate scope and cost.
3. Tree surveys will be limited to 100 person-hours, and would address up to 2.5 miles of access road as well as the Project work area at the dam site.
4. Revegetation plans will be integrated with all relevant CEQA mitigation plans related to mitigation for vegetation impacts.

Task 6.4—Minimum Deliverables

1. Draft and Final County Tree Permit Application.
2. Draft and Final Tree Survey Map with the accurate location, number, species, size (diameter measured four and one-half feet above ground, approximate height, and approximate canopy diameter), general health, and approximate age, if known, of trees to be removed.
3. Draft and Final Revegetation Plan.

Task 6.5—Special Status Plant Protocol Surveys

As stated in Condition 13 of the SCVHCP, special status plant surveys are required in sensitive habitats. For this Task 6.5, a qualified botanists will perform surveys as specified in the SCVHCP, where the Project could impact sensitive habitat areas, or in other areas, including up to 5 borrow sites per dam, where protocol level plant surveys may be required.

Task 6.5—Assumptions

1. Three rounds of surveys will be required to cover all potential bloom seasons. Each round will require two botanists for one field day each.
2. Project will avoid any special status plants documented during the plant surveys. A salvage plan, if required, may be performed under Task 6.13, Other Supplemental Services.

Task 6.5—Minimum Deliverables

1. Draft and Final Plant Surveys Technical Memorandum.

Task 6.6—Monitoring for Geotechnical Studies

Depending on the location, habitat, soil type and other factors, field geotechnical investigations may require monitoring of biological or cultural resources for compliance with regulatory permits. Consultant will provide qualified staff monitors with the permits, approval, or training required by relevant permits. The monitors shall provide initial environmental training materials to the geotechnical contractor.

Task 6.6—Assumptions

1. Up to 10 days of biological monitoring.

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2. Up to 4 days of cultural resource monitoring.
3. Ongoing environmental training of new field personnel shall be performed by the geotechnical contractor using provided materials.

Task 6.6—Minimum Deliverables

1. Draft Monitoring Results Memorandum.

Task 6.7—CEQA & Regulatory Compliance For Geotechnical Studies

As described under Task 2.1.2, Investigations and Analysis for the Planning Study, Consultant has assumed that impacts can be avoided through planning of the geotechnical investigations. If impacts cannot be reasonably avoided then Consultant will prepare a brief Initial Study and Negative Declaration or Mitigated Negative Declaration (IS/ND-MND) under this task to satisfy CEQA requirements. Consultant will use the District's existing documentation of resources and habitat level studies to evaluate potential impacts to biological resources within the survey area and vicinity to meet Valley Habitat Plan species-specific survey requirements, and recommend avoidance measures wherever possible to avoid impacts to special status species and waters of the US or State of California. The Initial Study checklist will be accompanied by discussions of resources area that may be impacted, including the nature of the impacts and proposed minimization and avoidance measure or mitigation measures.

Consultant will provide an administrative draft document for District review and will finalized this based on District comments. Consultant will work with the District to obtain approval of the ND-MND and will submit a Notice of Intent to adopt a Negative Declaration along with 15 copies of the documents to the State Clearinghouse to begin the 30-day public review period. Consultant will provide notification to the public in the form a notice in a local newspaper.

Task 6.7—Assumptions

1. No public meeting or other hearings will be necessary.
2. The District will receive up to three public comment letters that require formal responses.
3. District will pay for newspaper advertisements directly.

Task 6.7—Minimum Deliverables

1. Administrative Draft and Final IS/MND for geotechnical studies at each dam, as needed.
2. Fifteen (15) copies of Document to State Clearinghouse.
3. Draft and final text for newspaper notice.

Task 6.8—CDFW Incidental Take Permit Application (California Fish and Game Code 2081)

1. If the SCVHCP is not approved prior to initiation of permitting for Calero and Guadalupe dams, the Consultant will prepare a CDFW Incidental Take Permit (ITP) Application (under California Fish and Game Code 2081). Separate Incidental Take Permit Applications will be prepared for each of the dams to address potential take of state-listed species during construction or operation of the dams.

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2. The Consultant will use the District's existing documentation of resources and habitat level studies to evaluate potential impacts to state-listed species within the Project areas and vicinity. To the extent possible, the ITP applications will be based on the information provided in the Biological Assessment submitted to the USFWS for federally listed species.
3. The ITP applications will address each state-listed species under the jurisdiction of CDFW and will incorporate the following components:
4. Detailed analysis of direct, indirect, and cumulative effects of actions affecting state listed species and associated habitats.
5. Identification of the potential for "take" of state-listed species and specific measures to avoid or minimize potential take to the extent practicable.
6. Where appropriate, identification of additional actions that will assist in species conservation including actions identified in the Habitat Mitigation and Monitoring Plan will be developed under Supplemental Services.
7. Description of the monitoring and reporting programs necessary to assure CDFW that they will know when the authorized amount or extent of take is approached or exceeded.

Task 6.8—Assumptions

1. The ITP will utilize existing data or data collected under other tasks performed by the Consultant under this Agreement.
2. Development of habitat mitigation and monitoring plans, if required, will be conducted under subtask 6.13 Other Supplemental Services.
3. Consultant will prepare two administrative drafts and one final version of the ITP applications and will attend two meetings with CDFW and the District during preparation of the documents.

Task 6.8—Minimum Deliverables

1. First administrative draft ITP applications.
2. Second administrative draft ITP applications.
3. Final ITP applications.

Task 6.9—Habitat Mitigation and Monitoring Plan

In the event that the SCVHCP is not approved prior to initiation of permitting, Consultant will prepare a Habitat Mitigation and Monitoring Plan (HMMP) for upland species (including special status amphibians) in addition to the HMMP for fisheries developed in Task 3. The HMMP will identify conceptual measures that will be implemented by the District to mitigate temporary and permanent impacts to upland (including amphibians) federal and state listed species and sensitive habitats resulting from each of the Projects, including construction and operation. The HMMP would also address actions required to mitigate impacts to wetlands and other waters regulated by the USACE and the RWQCB under the federal Clean Water Act and the riparian habitats regulated by the CDFW under Section 1600 of the California Fish and Game Code.

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Separate documents would be prepared for each of the dams. The HMMP documents will identify and describe the following information:

- a. Upland habitats and species requiring mitigation.
- b. Goals of mitigation.
- c. Proposed mitigation measures.
- d. Proposed mitigation locations.
- e. Conceptual Implementation Plans.
- f. Conceptual Maintenance and Monitoring.
- g. Performance standards and criteria.
- h. Contingency Measures.

Task 6.9—Assumptions

1. The HMMP will provide conceptual level details of proposed habitat mitigation and monitoring for the two Project Components consistent with the Planning Phase of the Project.
2. Consultant will provide 5 hard copies and one electronic version of the Final HMMP. The District will submit the Final HMMP to the regulatory agencies with the final permit applications developed in Task 3.
3. If requested by the District, the Consultant will prepare one revised version of the Final HMMP based on input from the resource agencies up to and equal to the level of effort required to produce the final version of the HMMP.
4. Collection of data not already acquired by the District or the Consultant in other tasks for the Project, including focused surveys for wetlands, waters or special status species, will be addressed under subtask 6.13 Supplemental Services.
5. The HMMP will summarize information developed in the permitting Tasks (Task 3.7). This task will not include the development of final plans or specifications required to construct and implement the proposed mitigation.

Task 6.9—Minimum Deliverables

1. First administrative draft HMMP.
2. Second administrative draft HMMP.
3. Final HMMP.

Task 6.10—Fisheries Technical Memorandum

Steelhead conservation measures will be required to support the formal consultation with the National Marine Fisheries Service (Task 3.7.3). The Consultant will prepare a technical memorandum that will identify and evaluate feasible steelhead conservation measures within the Guadalupe River watershed including Guadalupe Creek below Guadalupe Dam, Alamitos Creek below Almaden Dam and Calero Creek below Calero Dam. This information will be developed concurrent with the planning phase of the Project so that any data gaps can be addressed prior to the initiation of the permitting tasks (Task 3.7).

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This memorandum will specifically include the following elements:

1. Summary of existing studies and agreements for steelhead habitat in the Guadalupe River watershed
2. Description of existing steelhead passage conditions below Guadalupe and Calero dams
3. Description of the extent and condition of existing steelhead spawning and rearing habitat above and below Guadalupe and Calero dams
4. Feasible measures to improve or maintain steelhead habitat in the Guadalupe River watershed
5. Potential Data gaps that would require additional studies and analysis

Task 6.10—Assumptions

The anticipated not-to-exceed amount associated with this Task is based on the following assumptions:

1. The technical memorandum will provide conceptual level details of potential fisheries conservation measures consistent with the Planning Phase of the Project.
2. Collection of data not already acquired by the District or the Consultant in other tasks for the Project will be addressed under subtask 6.13 Other Supplemental Services.
3. Feasibility of fisheries conservation measures will be evaluated based on existing information available to the Consultant.

Task 6.10—Deliverables

1. Draft Fisheries Technical Memorandum
2. Final Fisheries Technical Memorandum

Task 6.11—Treatment Plan For Historic Resources

If required as a condition for the completion of Section 106 compliance and issuance of the USACE 404 permit, Consultant will prepare a Treatment Plan for the relocation of National Register of Historic Places (NRHP)-eligible structures associated with the Bailey/Fellows Ranch. The Treatment Plan will serve as a guide for the conservation, treatment, relocation, and rehabilitation of the structures. The Treatment Plan will be prepared in consultation with the USACE and SHPO and will be consistent with the *Secretary of the Interior's Standards for Rehabilitation* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

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Task 6.11—Assumptions:

1. The Treatment Plan will be based on previously completed studies of the ranch structures including the analysis and recommendations from those studies.

Task 6.11—Deliverables:

1. Draft Historic Resources Treatment Plan
2. Final Historic Resources Treatment Plan.

Task 6.12—Additional Quantities of Services and Deliverables

Consultant will provide additional services and deliverables beyond the quantities of services and deliverables stated in Task 1 through 5 to include but not limited to:

1. Additional meetings, including meetings and phone calls of longer duration than specified.
2. Additional status/progress reports.
3. Additional technical studies.
4. Technical services including CADD, hazardous materials, right-of-way, environmental and biological studies.
5. Additional public outreach support.

Task 6.13—Other Supplemental Services

Other Supplemental Services Consultant may perform at the request of District in accordance with Task 6, may include but not limited to:

1. Additional data collection.
2. Salvage plans for special status plants.

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APPENDIX ONE SCOPE OF SERVICES

VI. ADDITIONAL TERMS AND CONDITIONS

A. Consultant as Independent Contractor

1. Consultant will perform all services as an independent contractor and not an agent or employee of District.
2. The expertise and experience of Consultant are material considerations for District'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's obligations hereunder, without prior written consent of District, 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 moneys 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 the District.

B. Consultant's General Responsibilities

1. Standard of Care
 - a. Consultant and its sub-consultants must perform services in accordance with those standards of care that are generally recognized as being used by competent persons in Consultant's area of specialty in the State of California.
 - b. Consultant and its sub-consultants must perform 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.
2. Unless the requirements for the Scope of Services described in this Agreement are specifically modified in writing, Consultant must provide its services and deliverables as required.

C. Confidentiality

Due to the nature of the services the Consultant will provide under the Agreement, there may be disclosure to the Consultant of detailed information about the District'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. The Consultant understands and acknowledges that District staff members providing information to the Consultant do so with the understanding that such information will be handled appropriately. In the event the Consultant receives such restricted or confidential information, the Consultant will limit access to the information to only those of the Consultant's employees, its subcontractors, and its subconsultants authorized by the District to have the information. The Consultant will notify the District's

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Project Manager immediately of any request by any third party to have access to the information, and will not disclose the requested information without first receiving express written authorization from the District's Project Manager. The requirements of this section will survive completion of the Agreement.

D. Project Management

1. The Project Manager for the District is Bal Ganjoo, Senior Project Manager.
2. The Project Manager for Consultant is as indicated in Attachment One of this Appendix.
3. The District's Project Manager or his designee is the only person authorized to accept Consultant's deliverables on behalf of the District.

E. Task Orders

1. Supplemental Services will be assigned to the Consultant through issuance of Task Orders. After Supplemental Services to be performed under this Agreement are identified and communicated to Consultant by the District Project Manager, the Consultant will prepare a proposed Task Order. The proposed Task Order must identify the following:
 - a. description of the services, including deliverables;
 - b. the total not-to-exceed amount for Consultant to complete the services, including estimated number of hours per assigned staff to complete the services;
 - c. proposed staff that will be assigned to complete the services, including resumes if not previously provided to the District Project Manager;
 - d. estimated cost of each reimbursable expense, including any applicable fees;
 - e. time schedule for completing the services and
 - f. copies of applicable state and federal permits required to complete the services, unless previously provided to the District Project Manager.
2. The Consultant agrees that the not-to-exceed amount 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 the District's Deputy Operating Officer, and the Consultant's Project Manager.

APPENDIX ONE SCOPE OF SERVICES

3. The Consultant must not commence performance of work or services on a Task Order until it has been approved by the District Deputy Operating Officer and notice to proceed has been issued by the District's Project Manager. No payment will be made for any work 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 the District for an individual Task Order will not exceed the amount agreed to in the Task Order.

F. Conflict of Interest

1. Consultant represents that there exists no actual or potential conflict of interest concerning the services to be performed under this Agreement. Consultant represents that Consultant's performance under the 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 the District or use in the performance of Consultant's duties under the 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 the District, for the possession and use of such materials.
2. Upon District's request, Consultant will complete, execute, and submit California Fair Political Practices Commission Form 700.
3. Consultant also 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 will not act as a consultant or expert for any party in support of any potential or active claim or legal action against the District by such party.
4. Consultant, Consultant's parent company, Consultant's subsidiaries, or any affiliated entity sharing substantially similar ownership of or control with Consultant will not submit a proposal: (i) for any contract to be awarded for design, construction management, or the construction of any project that is related to the services provided under the agreement; or (ii) in response to any request for proposal or District 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.

G. Term and Termination

1. This paragraph G., Term and Termination and the following paragraph H., Consultant's Compensation Upon Termination or Suspension, of Section VI. Additional Terms and Conditions, replaces the paragraph 2

APPENDIX ONE SCOPE OF SERVICES

stated in the Standard Consultant Agreement portion of this Agreement, at Section VI. Changes in Work.

2. Term & Automatic Termination:

This Agreement encompasses all services for which Consultant is responsible to provide within the time limits and not-to-exceed amount 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 amount of any Task Order.

3. District's Rights

- a. **Suspension:** District may, by written notice to Consultant, suspend any or all services pursuant to this Agreement or to any individual Task Order. District may subsequently terminate this Agreement or any Task Order for convenience, or determine to proceed. If a decision to proceed is not made within ninety (90) days from the date of the notice of suspension, any decision to proceed must be conditioned upon execution of a new Notice-To-Proceed or Task Order.
- b. **Termination for Convenience:** District may, by written notice to Consultant, terminate all or part of this Agreement or any Task Order at any time for District'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 Section H., Consultant's Compensation Upon Termination of Suspension, referenced below.
- 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 thirty (30) days (or a reasonable extension thereof, if requested, which extension will not be unreasonably withheld) after receipt of written notice from District specifying such failure or violation, District 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 District's convenience, and Consultant will

APPENDIX ONE SCOPE OF SERVICES

receive payment that is allowed by this Agreement for a termination for convenience.

- e. The rights and remedies provided herein to District are in addition to any other rights and remedies provided by law, this Agreement, or a Task Order.

H. Consultant's Compensation Upon Termination or Suspension

- 1. In the event of termination of this Agreement or any Task Order, or suspension of services by District, Consultant shall receive compensation based on satisfactory performance, accepted by the District Project Manager, as follows:
 - a. For 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. For Reimbursable Expenses—Consultant shall be entitled to receive compensation for all authorized Reimbursable Expenses incurred prior to termination and all authorized expenses incurred to demobilize from the Project after the date of termination.
 - c. In no event shall the total compensation paid for any item of service exceed the payment specified in the applicable Task Order for that item of service.

I. Release of Information Prohibited

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

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J. Notices

All notices will be deemed to have been given when made in writing and when delivered or mailed to the representatives of the District and the Consultant at their respective addresses as follows:

District:

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638
Attention: Katherine Oven, Deputy Operating Officer
Water Utility Capital Division
Email: KOven@valleywater.org

Consultant:

GEI Consultants, Inc.
180 Grand Avenue, Suite 1410
Oakland, CA 94612
Attention: William Rettberg, P.E., Vice President
Email: wrettberg@geiconsultants.com
Direct (510) 350-2910
Fax: (510) 350-2901

K. Good Neighbor

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

L. Appendix One Scope of Services Attachments

The following listed Attachments referred to herein are incorporated in this Appendix One Scope of Services as though set forth in full:

Attachment One—Consultant's Key Staff and Subconsultants
Attachment Two—Dispute Resolution
Attachment Three—Task Order Template
Attachment Four—Reference Materials
Attachment Five—District Procedures and Work Instructions
Attachment Six—DSOD Interim Hydrology Policy

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**APPENDIX ONE
ATTACHMENT ONE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

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

Team Member	Project Role
Bill Rettberg-Senior Consultant Grade 8	Project Manager
Mark Freitas-Senior Professional Grade 7	Deputy Project Manager, Engineering Planning, Geotechnical Engineering,
Joe Green-Heffern-Senior Professional Grade 7	Engineering Planning, Civil Engineering
Len Sansone-Senior Professional Grade 7	Geotechnical Engineering, Borrow Studies
Steve Verigin-Senior Consultant Grade 8	Principal-in-Charge
Alberto Pujol-Senior Consultant Grade 8	QA/QC, Design Support and Design Review
Dan Wanket-Senior Professional Grade 7	Project Controls, Cost Estimating
Matt Powers-Senior Professional Grade 5	Project Engineer
Enrico Rufini-Senior Professional Grade 5	Engineering Geology
Mark Fortner-Senior Professional Grade 7	Hydraulics and Hydrology

2. If necessary and appropriate, Consultant will employ subconsultants it deems appropriate to the complexity and nature of the required Services. All subconsultants must, if their specialty is licensable, be licensed by the State of California to perform their specific Services. Consultant must obtain District's approval of all subconsultants. Upon District's request, Consultant must provide copies of all subconsultant contract agreements. Any delegation or subcontracting of any services by Consultant will not operate to relieve Consultant of its responsibilities under this Agreement.

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CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

The following subconsultants are authorized to work on the Project:

Firm	Project Role
URS	Environmental, CEQA, Permitting, Dam Engineering Support
Cal Engineering & Geology	Geotechnical Investigations, Geotechnical Engineering
David Ford Consulting Engineers	Hydraulics and Hydrology
DCMS	Constructability and Value Engineering
H. T. Harvey & Associates	CEQA and Permitting Support, Biological Impacts, HCP Compliance
JDH Corrosion Consultants, Inc.	Corrosion Engineering and Evaluations
Pacific Geotechnical Engineering	Geotechnical Investigations, Engineering Geology, Geotechnical Engineering
PHA Transportation Consultants (Pang Ho & Associates)	Traffic and Transportation Impacts
Telamon Engineering Consultants, Inc.	Civil Engineering, CADD, Surveying
TRA Environmental Sciences, Inc.	Environmental, CEQA and Permitting Support, Land Use and Planning, Air Quality/GHG, Noise, Population/Housing, Recreation, Visual, HCP Compliance
Underwater Resources	Underwater Investigations

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CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

Contact information for the above listed Sub-Consultants is as follows:

Firm	Contact Information
URS Corporation	1333 Broadway, Suite 800 Oakland, CA 94612 T: 510-893-3600 Contact: Bill Martin Phone: 510-874-3020 Contact e-mail: Bill.H.Martin@urs.com
Cal Engineering & Geology	1870 Olympic Boulevard, Suite 100 Walnut Creek, CA 94596 T: 925-935-9771 Contact: Phil Gregory, G.E. Phone: 925 935 9771 Contact e-mail: pgregory@caleng.com
David Ford Consulting Engineers	2015 J Street, Suite 200 Sacramento, CA 95811 T: 916-447-8779 F: 916-447-8780 Contact: David Ford Phone: 916-447-8779 Contact e-mail: ford@ford-consulting.com
DCMS	244 California Street, Suite 501 San Francisco, CA 94111 T: 925-980-8590 Contact: Sherman Honeycutt Phone: 925-980-8590 Contact e-mail: Sherman.honeycutt@design-cm.com
H. T. Harvey & Associates	983 University Avenue Building D Los Gatos, CA 95032 T. 408.458.3246/F. 408.458.3210 Contact: Steve Rottenborn Phone: 408-722-0931 Contact e-mail: srottenborn@harveyecology.com

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CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

Firm	Contact Information
JDH Corrosion Consultants, Inc.	100 Willow Pass Court Concord, CA 94520 T: 925.927.6630 ext.121 F: 925.927.6634Contact: J. Darby Howard, Jr. Phone:925-927-6630, ext. 121 Contact e-mail: dhoward@jdhcorrosion.com
Pacific Geotechnical Engineering	16055 Caputo Drive, Suite D Morgan Hill, CA 95037 T: 408-778-2818 / F: 408-779-6879 Contact: Reid Fisher T 408-778-2818 ext. 402 F: 408-779-6879 Contact e-mail: rfisher@pacific-geotechnical.com
PHA Transportation Consultants (Pang Ho & Associates)	2711 Stuart Street Berkeley, CA 94705 T: 510-848-9233 Contact: Pang Ho Phone:510.848.9233 Contact e-mail: pang@pangho.com
Telamon Engineering Consultants, Inc.	855 Folsom Street, Suite 142 San Francisco, CA 94107 Tel: (415) 837-1336/Fax: (415) 837-1354 Contact: Mennor Chan Phone: 415-837-1336 Contact e-mail: mennor.c@telamoninc.com
TRA Environmental Sciences, Inc.	545 Middlefield Road, Suite 200, Menlo Park, CA 94025 T: (650) 327-0429 Contact: Barbara Beard, Director of Environmental Analysis Phone: (650) 464-5217 (direct) Contact e-mail: beard@traenviro.com
Underwater Resources	Pier 26, The Embarcadero San Francisco, CA 94105 www.underwater-resources.com 415/974-5464 Fx 415/974-1749 Contact: Tom Belcher Phone: 415-974-5464 Contact e-mail: tbelcher@underwater-resources.com

**APPENDIX ONE
ATTACHMENT ONE
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

3. None of the above named Consultant staff or sub-consultants will be replaced without the approval of the District's Project Manager. If Consultant's Project Manager or any other designated key staff person or sub-consultant fails to perform to the satisfaction of the District, on written notice from District's Project Manager, Consultant will have fifteen (15) calendar days to remove that person from the Project and provide a replacement acceptable to the District.
 - A. Consultant will not charge District the time it takes Consultant's replacement personnel to obtain the District specific Project knowledge in the possession of the person or persons being replaced.
 - B. The Project team organization chart and delegated responsibilities of each team member will be revised accordingly and submitted to the District for concurrence.
4. The District's Project Manager may approve any revisions to Consultant's key personnel or designated sub-consultant as an administrative modification to this Agreement.

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**APPENDIX ONE
ATTACHMENT TWO
DISPUTE RESOLUTION**

I. CONSULTANT'S QUESTIONS & CONCERNS

Questions regarding the terms, conditions and Services relating to this Agreement will be decided by the District who will furnish the decisions to Consultant in writing within thirty (30) Days after receiving a written request from Consultant.

II. DISPUTE RESOLUTION

A. Alternate Dispute Resolution (ADR)

1. District intends to use ADR techniques including Partnering and Mediation to resolve disputes relating to the Project.

B. Consultant and its sub-consultants are expected to participate in all ADR efforts.

C. The cost of Partnering training facilities and facilitator will be borne by District.

III. 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 District and Consultant.

IV. MEDIATION

A. Voluntary Mediation

1. In the event a dispute or issue is not resolved by the Internal Review process stated in the Standard Consultant Agreement, Section VIII. Resolution of Disputes, District and Consultant agree to attempt to resolve the matter by Mediation. The External Review paragraph of Section VIII. is hereby deleted.
2. Said Mediation is voluntary, non-binding, and intended to provide an opportunity for the parties to evaluate each other's cases and arrive at a mutually agreeable solution.
3. These provisions relating to voluntary Mediation shall not be construed or interpreted as mandatory arbitration.

B. Initiation of Mediation

1. Any party to a dispute or claim may initiate Mediation by notifying the other party or parties in writing.

C. Request for Mediation

1. A Request for Mediation must contain a brief statement of the nature of the dispute or claim, and the names, addresses, and phone numbers of

**APPENDIX ONE
ATTACHMENT TWO
DISPUTE RESOLUTION**

all parties to the dispute or claim, and those who will represent them, if any, in the Mediation.

D. Selection of Mediator

1. Upon receipt of a Request for Mediation, within fourteen (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.

E. Qualifications of a Mediator:

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

F. Vacancies

1. If any Mediator becomes unwilling or unable to serve, another Mediator will be selected unless the parties agree otherwise.

G. 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 all parties and to the Mediator.

H. 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 sixty (60) Days after selection of the Mediator.

**APPENDIX ONE
ATTACHMENT TWO
DISPUTE RESOLUTION**

I. Identification of Matters in Dispute

1. Unless a longer period of time is required by the Mediator, at least ten (10) Days before the first scheduled Mediation session, each party must provide the Mediator a brief 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.

J. Authority of Mediator

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

K. 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.

L. Confidentiality

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.

**APPENDIX ONE
ATTACHMENT TWO
DISPUTE RESOLUTION**

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;
 - d. Whether the other party had or had not indicated willingness to accept a proposal for settlement made by the Mediator.
- M. No Stenographic Record
1. There shall be no stenographic record of the Mediation.
- N. Termination of Mediation
1. The Mediation shall be terminated:
 - a. By the execution of a Settlement Agreement by the parties;
 - b. By a written declaration of the Mediator to the effect that further efforts at Mediation are no longer worthwhile; or
 - c. By a written declaration of a party or parties to the effect that the Mediation proceedings are terminated.
- O. Exclusion of Liability
1. No Mediator shall be a necessary party in judicial proceedings related to the Mediation.
- P. Interpretation and Application of These Mediation Provisions
1. 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.

**APPENDIX ONE
ATTACHMENT TWO
DISPUTE RESOLUTION**

2. All other expenses of the Mediation, including required traveling 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.

V. COMPENSATION FOR PARTICIPATION IN MEDIATION

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

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APPENDIX ONE
ATTACHMENT THREE
TASK ORDER TEMPLATE

Task Order No. _____

Agreement: Standard Consultant Agreement – Contract No. _____ (“Agreement”) Between the Santa Clara Valley Water District (“District”) and _____ (“Consultant”), dated _____.

District Project Manager: _____

Consultant Project Manager: _____

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

1. Upon full execution of this Task Order Number: _____, as set forth in section VI.E. of Appendix One and issuance of a notice to proceed by the District Project Manager, Consultant is hereby authorized to perform the work described in Attachment A to this Task Order. Any costs incurred, work performed or expenditures by Consultant before this Task Order is executed or before the issuance of the notice to proceed will be considered outside the contracted scope of work and will not be eligible for payment.
2. Both the scope of services to be performed and the deliverables to be provided under this Task Order are described in Attachment A which is attached hereto and incorporated by this reference. Attachment A identifies the following:
 - a. Consultant personnel to be assigned to perform the services, including resumes if not previously provided to the District Project Manager
 - b. The estimated number of hours required to perform the services assigned to each assigned Consultant personnel
 - c. Estimated cost of each reimbursable expense, including any applicable fees
 - d. Project schedule for completing the scope of services
3. Consultant will be compensated at the hourly rates established in Appendix Two 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 will become effective on the date of signature by District Deputy Operating Officer and Consultant Project Manager, and remain in effect until the earlier of: completion of the tasks set forth in Attachment A or {enter expected completion date}.
5. Copies of applicable state and federal permits required to complete the work in Attachment A are attached to this Task Order, unless the Consultant Project Manager previously provided the appropriate permits to the District.
6. Consultant will perform all services described in Attachment A to this Task Order in accordance with the terms and conditions of the Agreement.
7. Signatures:

Signature/Print Name: _____
CONSULTANT PROJECT MANAGER
ON BEHALF OF CONSULTANT

DATE

Signature/Print Name: _____
SANTA CLARA VALLEY WATER DISTRICT
DEPUTY OPERATING OFFICER

DATE

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**APPENDIX ONE
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref #	Description
1	Santa Clara Valley Water District , April 2012, Supporting Technical Information Document (STID) for Calero Main and Auxiliary Dams
2	Santa Clara Valley Water District , April 2012, Supporting Technical Information Document (STID) for Guadalupe Dam
3	URS Corporation, 2012, Final Report SSE1B-B Volume 1 & Volume 2- Appendices, Seismic Stability Evaluation of Calero Main Dam and Calero Auxiliary Dam, October 26, 2012.
4	URS Corporation, 2012, Final Report SSE1B-C Volume 1 & Volume 2- Appendices, Seismic Stability Evaluation of Guadalupe Dam, May 22, 2012.
5	URS Corporation, 2012, Design Memorandum No. 7A (DM-7A), Recommended Reservoir Restriction, Seismic Stability Evaluation SSE1B, Calero Reservoir, October 26, 2012.
6	URS Corporation 2012, Design Memorandum No. 8B (DM-8B), Conceptual Remedial Alternatives, Seismic Stability Evaluation SSE1B, Calero Main Dam, October 26, 2012.
7	URS Corporation AMEC, 2012, Design Memorandum No. 7, Recommended Reservoir Restriction, Seismic Stability Evaluation SSE1B, Almaden and Guadalupe Reservoirs, February 28, 2012.
8	URS Corporation AMEC, 2012, Design Memorandum No. 8A (DM-8A) , Conceptual Remedial Alternatives, Seismic Stability Evaluation SSE1B, Guadalupe Dam, March 7, 2012.
9	Nelson, J. L., 2007, Calero Main Dam (No. 72-3) Forensic Geologic Report, Santa Clara Valley Water District, October 2007.
10	Draft Application Report: Calero Reservoir Enlargement, Santa Clara Valley Water District, June 1982.
11	DSOD Letter dated April 25, 2012 regarding operating restrictions and Project Schedule for Guadalupe Dam
12	DSOD Letter dated March 23, 2012 regarding operating restrictions and Project Schedule for Calero Dam
13	Archives & Architecture, 2006, Historical and Architectural Evaluation, Bailey / Fellows Ranch site, Calero County Park, November 28, 2005 (Rev. January 3, 2006)

**APPENDIX ONE
ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref #	Description
14	Santa Clara Valley Water District, 2012, Dam Maintenance Program, Final Program Environmental Impact Report, January 2012.
15	Santa Clara Valley Water District, 2012, Dam Maintenance Program, Final Program Environmental Impact Report- Appendices, January 2012.
16	Santa Clara Valley Water District, 2012, 2012 Water Supply and Infrastructure Master Plan, October 2012
17	Black & Veatch, 2012, Guadalupe Dam Intake Structure Evaluation, (memorandum), August 1, 2012
18	Santa Clara Valley Water District, 2010, Calero/Fellows Dike, Planning Study Report, March 2010.
19	Santa Clara Valley Water District, 2010, Standards for GIS Products, July 2010.

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**APPENDIX ONE
ATTACHMENT FIVE
DISTRICT PROCEDURES AND WORK INSTRUCTIONS**

Reference #	Document Title
1	Capital Project Delivery – Document #Q751D01
2	Create Work Plan – Document #W75102
3	Planning Phase WBS Item Descriptions and Instructions – Document #W73002
4	Environmental Planning – Document #Q520D01
5	Purpose of Environmental Planning and CEQA – Document #W520M01
6	CEQA Documentation Guidelines – Document #W520M02
7	Mitigation Monitoring and Reporting Programs – Document #W520M03
8	Responsible Agency – Document #W20M04
9	Best Management Practices Handbook – Document #W751M01
10	Design Phase WBS Item Descriptions and Instructions – Document #W73004

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APPENDIX ONE ATTACHMENT SIX

DIVISION OF SAFETY OF DAMS (DSOD)- INTERIM HYDROLOGY POLICY (6/21/2012)

DSOD policy after the 1999 release of HMR 58/59 was to not actively require new hydrology studies as a result of the updated HMR. If a new dam was proposed or major work was being performed that affected the spillway, then those projects would be analyzed under HMR 59 with the requirement of 1.5 feet of residual freeboard.

Also, if dam owners initiated an updated hydrological study on their own using HMR 59, we would then follow and do our evaluation of the spillway with HMR 59.

Otherwise, dams that were previously analyzed using HMR 36 and were able to pass the PMF without overtopping the dam were considered adequate. If a dam was not able to pass the PMF based on HMR 36, then the spillway remediation would need to be designed to pass the PMF based on HMR 59.

So, now after learning more about the methodologies used to derive HMR 59 and the fact that the NOAA Atlas 14 has recently been released, DSOD is in a transition period with our hydrology policy with respect to HMR 59.

DSOD still requires as before that new dams and major projects be designed under HMR 59, and if an existing dam previously analyzed using HMR 36 can adequately pass a PMF, then no additional work is required at this time.

If an existing dam was previously shown to not adequately pass a PMF based on HMR 36 (overtops the dam), then the dam owner has the following options to consider. It may be advantageous for the dam owner to do a phased approach in evaluating the level of study required as outlined below:

1. Using HMR 59, determine if the precipitation is higher or lower than that of HMR 36. In some areas, HMR 59 is similar to HMR 36 or may show a reduction. If HMR 59 is equal to or lower than HMR 36, then the adequacy of the spillway is based on HMR 59.
2. If the results from HMR 59 are higher than HMR 36, then the owner can either remediate the spillway with those results which may be conservative, or develop a modified HMR 59 accounting for the updated NOAA Atlas 14 data as compared to NOAA Atlas 2 data. In this approach, the results from the HMR 36 should be used as a lower bound in evaluating the results from the modified HMR 59 study. If the results are reasonable, then the modified HMR 59 may be used as the basis for the PMF to evaluate the adequacy of the spillway.
3. Lastly, if the modified HMR 59 study continues to show a significant increase in precipitation as compared to HMR 36, then the dam owner may choose to have a SSPMP analysis performed. If this option is chosen, then the input parameters and methods used need to be thoroughly discussed with us before initiating the study. Results of the SSPMP may or may not be accepted based on the reasonableness of the results compared to HMR 36, historical storms, etc. It would be advantageous for the dam owner to have an independent technical advisor to review the parameters and methodologies used by the consultant performing the SSPMP study since there currently is not a standardization in place for SSPMP studies.

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APPENDIX TWO FEES AND PAYMENTS

I. GENERAL

Payment for all services performed by Consultant to the satisfaction of the District as listed in Appendix One - Scope of Services for this Agreement will be based upon the Total Not-to-Exceed (NTE) Fees stated in this Appendix Two for the performance of the associated tasks. The District will make payments to the Consultant under the terms provided for in this Appendix. Payments made by the District to the Consultant for services rendered will be considered full compensation for all personnel, materials, supplies, sub-consultant(s), and equipment including reimbursable, travel and per diem expenses used by the Consultant to complete the work.

II. TOTAL FUNDING AUTHORIZED UNDER THIS AGREEMENT

Total payment for services performed, as defined in Appendix One - Scope of Services, will not exceed a total amount of **\$4,903,830** during the term of this Agreement. Under no conditions will the total compensation to the Consultant exceed this NTE amount without prior written approval in the form of an amendment to this Agreement executed by the District's Board of Directors ("Board"), or Chief Executive Officer as authorized by the Board. The Consultant guarantees that it will complete the contracted Scope of Services for the Total NTE Amount stated herein.

III. 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 District to the Consultant for Supplemental Services without prior written authorization by the District as stated in Appendix One of this Agreement.

COST BREAKDOWN

Task	Description	Total Fixed (Not-to-Exceed) Fees
1	Project Management	\$559,722
2	Planning Study	\$1,642,112
3	Environmental Documentation and Permit Support	\$1,529,310
4	Develop On-site Borrow and Spoil Requirements	\$360,862
5	Design Support	\$120,339
6	Supplemental Services	\$691,485
Total Not-to-Exceed Amount		\$4,903,830

APPENDIX TWO FEES AND PAYMENTS

IV. TERMS AND CONDITIONS

Payments for services performed, as defined in Appendix One - Scope of Services, will be based on the following terms:

- A. District will pay for services provided by the Consultant according to the schedule of rates for professional, technical, and administrative personnel as listed below in the Hourly Rate Schedule.
- B. The stated hourly rates are effective for the term of this Agreement unless otherwise revised as indicated. After twelve (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 the District, provided Consultant submits written notice to District of Consultant's request to revise the hourly rates ninety (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 twelve (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 2.0%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by the District Deputy Operating Officer.

HOURLY RATE SCHEDULE

Classification/Staff	Hourly Rate
PRIME – GEI INC	
Senior Consultant-Grade 8	\$239
Senior Professional-Grade 7	\$212
Senior Professional-Grade 6	\$179
Senior Professional-Grade 5	\$157
Project Professional-Grade 4	\$133
Project Professional-Grade 3	\$118
Staff Professional-Grade 2	\$108
Staff Professional-Grade 1	\$98

APPENDIX TWO FEES AND PAYMENTS

Classification/Staff	Hourly Rate
Senior CADD Drafter and Designer	\$118
CADD Drafter/Designer and Senior Technician	\$108
Technician, Word Processor, Administrative Staff	\$88
SUBCONSULTANT(S)	
URS Corporation	
Principal	\$232
Principal Engineer/Geologist/Scientist	\$200
Senior Project Engineer/Geologist/Scientist IV	\$170
Senior Project Engineer/Geologist/Scientist III	\$160
Senior Project Engineer/Geologist/Scientist II	\$140
Senior Staff GIS/CADD	\$129
Senior Project Engineer/Geologist/Scientist I	\$125
Project Engineer/Geologist/Scientist	\$115
Senior Engineer/Geologist/Scientist II	\$110
Senior Engineer/Geologist/Scientist I	\$100
Staff Engineer/Geologist/Scientist II	\$90
Staff GIS/CADD	\$85
Staff Engineer/Geologist/Scientist I	\$85
Administrative Professional	\$70

APPENDIX TWO FEES AND PAYMENTS

Classification/Staff	Hourly Rate
Cal Engineering & Geology	
Principal Engineer or Geologist	\$198
Consulting Geotechnical Engineer	\$195
Senior Engineer or Geologist	\$140
Project Engineer or Geologist	\$110
Staff Engineer or Geologist	\$95
Field Technician (Prevailing Wage)	\$105
Project Assistant	\$70
David Ford Consulting Engineers	
Principal	\$265.78
Sr H&H Engineer	\$188.61
Mid-level H&H Engineer	\$131.60
Jr H&H Engineer	\$88.41
Project Coordinator	\$88.59
Admin/Clerical	\$66.87
Planner/technical writer	\$111.67
DCMS	
Principal	\$193.75
H.T. Harvey & Associates	
Principal	\$215
Principal (Sr. Wetlands/Plant Ecologist)	\$215

APPENDIX TWO FEES AND PAYMENTS

Classification/Staff	Hourly Rate
Sr. Ecologist 1 (Project Manager/Wildlife Ecologist)	\$147
Sr. Ecologist 1 (Herpetologist)	\$147
Ecologist 1 (Plant Ecologist)	\$116
GIS Specialist	\$105
Support	\$80
JDH Corrosion Consultants, Inc.	
Principal-Project Manager	\$191.40
Asst. Project Manager	\$175.45
Project Engineer	\$127.28
Sr. Corrosion Tech.	\$127.28
Project Engineer	\$143.55
Field Engineer	\$98.12
Field Technician	\$109.96
Field Technician	\$111.65
Drafting – AutoCad	\$95.70
Pacific Geotechnical Engineering	
Supervising Engineer	\$177
Senior Geologist	\$156
Project Geologist	\$131
Senior Engineer	\$156
Staff Geologist	\$91
Staff Geologist	\$91

APPENDIX TWO FEES AND PAYMENTS

Classification/Staff	Hourly Rate
Geologist	\$121
Drafting	\$76
PHA Transportation Consultants	
Principal	\$160
Senior Engineer	\$140
Telamon Engineering Consultants, Inc.	
Project Manager	\$198
Senior Engineer	\$175
Engineer III	\$150
Engineer II	\$125
Engineer I	\$105
CAD Drafter IIII	\$125
Survey Party Chief	\$178
Survey Field Crew	\$125
Clerical	\$85
TRA Environmental Sciences, Inc.	
Senior Project Manager	\$160
Senior Biologist II	\$140
Senior Analyst II	\$140
Analyst III	\$110
Support Staff	\$75

APPENDIX TWO FEES AND PAYMENTS

Classification/Staff	Hourly Rate
Underwater Resources, Inc.	
Project Manager	\$135/hr
Diving Supervisor	\$1,100/shift
Diving Supervisor OT	\$170/OT hr
Diver	\$1,640/shift
Diver OT	\$265/hr
Shop Labor	\$85/hr

- C. Unused fees from a completed task may be reallocated to a future task provided that the Agreement total NTE amount is not exceeded. However, transferring of fees from future tasks to current tasks will not be permitted.
- D. Not to exceed fees and services to be performed under Supplemental Services will commence only after written approval from the District Deputy Operating Officer pursuant to an issued Task Order.
- E. Expenses incurred by the Consultant for Subconsultants providing professional services will be reimbursed at actual cost plus 5%.
- F. All other direct 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 will be billed on a monthly basis at actual cost plus 5% linked to each Agreement Task, as approved by the District's Project Manager, provided that the Agreement total NTE amount is not exceeded. Consultant will provide receipts for each other direct expense item(s) with monthly invoices submitted.
- G. Automobile travel expenses in Consultant vehicles will be paid at the current IRS rate. District will not reimburse Consultant and its sub-consultants or subcontractors for travel to and from District Headquarters and surrounding campus located at 5700 Almaden Expressway, San Jose, California. District will reimburse Consultant and its subconsultants for mileage incurred from District Headquarters or Consultant's and subconsultants' firm address, whichever is closer to the destination, to Project site and to meeting locations with regulatory agencies, if directed or authorized by the District.

APPENDIX TWO FEES AND PAYMENTS

- H. Consultant's monthly invoices will be prepared in accordance with the terms of this Appendix Two and the Standard Consultant Agreement Section IV, Fees and Payments, and represent work performed and reimbursable costs incurred during the identified billing period and will be consistent with Appendix One and include the following:
1. Personnel Category and employee name itemized with all labor charges by Scope of Service Task.
 2. Direct charges by Scope of Service Task.
 3. Consultant's summary of the amount Consultant has been billed by their Subconsultants and further detailed by Scope of Service Task.
 4. Direct charges must reflect actual fees versus the Agreement not-to-exceed fees in this Appendix Two.
- I. Before submitting monthly invoices, a draft progress report and invoice (in Adobe PDF format) will be provided by the Consultant for preliminary review by the District Project Manager. Upon preliminary approval by the District, the Consultant will mail the complete signed and dated hardcopy invoice, including all supporting documentation. District'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.
- J. Invoices will include a summary of labor expenditures, direct costs, and billed sub-consultant charges. Billing statements, transmitted separately from the monthly progress reports, will be organized such that the billing categories correspond with the Scope of Services tasks.
- K. District's Project Manager will review hardcopy invoice within 5 working days of receipt, address any questions with Consultant's Project Manager, and approve the undisputed amount of the invoice within 10 working days of receipt of the invoice. District will pay undisputed invoice amounts within 30 calendar days from date invoice is received by District's Project Manager.

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APPENDIX TWO FEES AND PAYMENTS

L. Prevailing Wages

1. The services to be performed pursuant to this Agreement are “public works” subject to California Labor Code Section 1771, et. seq. and the applicable implementing regulations. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State during the term of this Agreement. Notwithstanding any other provisions 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.
2. Labor Code Section §1720 includes “Inspection and Land Surveying” in its definition of “Public Works.” If Consultant’s Scope of Services includes such work, Consultant must comply with all Labor Codes applicable to prevailing wages.

M. Consultant’s services will be performed by its staff members and subconsultants’ staff members at the lowest hourly rates commensurate with the complexity of the required services.

N. Consultant’s attention is directed to Section IV of the Standard Consultant Agreement regarding FEES AND PAYMENT and the corresponding retention clause.

O. Small Business Enterprise (SBE) Participation

This Agreement provides for the Consultant to include California Department of General Services certified Small/Micro Businesses in the performance of the services, estimated to be 30 percent or more of the Total Not to Exceed Amount stated in this Appendix Two and Consultant agrees to use its best efforts to meet this goal.

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APPENDIX THREE SCHEDULE OF COMPLETION

1. This Agreement commences on the date specified in the introductory paragraph of this Agreement. This Agreement expires May 31, 2017, unless its term is modified by a written amendment hereto, signed by both parties prior to its expiration.
2. Consultant will commence Tasks listed in Appendix One of this Agreement upon receipt of the Notice-to-Proceed (NTP) issued by the District.
3. Consultant will perform and complete the Services described in Appendix One, Scope of Services, in accordance with the Project Schedule table as shown below. Consultant will coordinate services with the District to provide the timeline of all tasks and subtasks including the site visits, document review, meetings and Deliverables. A detailed schedule including subtask deliverables will be included in the Planning Phase Work Plan.
4. 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 District. Consultant's attention is directed to District's Standard Consultant Agreement, Section VII. Delays and Extensions.
5. District's Project Manager and Consultant may agree to modify the schedule specified for Consultant's performance as an administrative modification to the Agreement.
6. Project Delays—The Consultant will make all reasonable efforts to comply with the Project Schedule as shown here in Appendix Three. In the event the Project Schedule will be delayed, Consultant will notify the District 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, District may in its discretion grant a reasonable adjustment in the Project Schedule. This language will prevail should any conflict or discrepancy occur between this provision and Section VII. Delays and Extensions.

PROJECT SCHEDULE

Task	Description	Duration from NTP
1	Project Management Services	Duration of the Agreement
1.1	Planning Phase Work Plan – Calero and Guadalupe Dams Combined	1 month from NTP
2.1.3	Problem Definition Report – Calero Dam	5 months from NTP
2.1.3	Problem Definition Report – Guadalupe Dam	7 months from NTP
2.2.5	Planning Study Report – Calero Dam	12 months from NTP

APPENDIX THREE SCHEDULE OF COMPLETION

Task	Description	Duration from NTP
2.2.5	Planning Study Report – Guadalupe Dam	14 months from NTP
2.2.6	Transition Reports – Calero Dam	13 months from NTP
2.2.6	Transition Reports – Guadalupe Dam	15 months from NTP
3.4.4	Draft Environmental Impact Report – Calero Dam	9 months from approval of Staff Recommended Alternative
3.4.4	Draft Environmental Impact Report – Guadalupe Dam	10 months from approval of Staff Recommended Alternative
3.6	Final Environmental Impact Report – Calero Dam	13 months from approval of Staff Recommended Alternative
3.6	Final Environmental Impact Report – Guadalupe Dam	14 months from approval of Staff Recommended Alternative
3.7	Regulatory Permitting	36 months from NTP
4	Develop On-site Borrow and Spoil Requirements – Calero Dam	5 months from NTP
4	Develop On-site Borrow and Spoil Requirements – Guadalupe Dam	7 months from NTP
5	Design Support	39 months from NTP
6	Supplemental Services	Duration of the Agreement

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APPENDIX FOUR INSURANCE

Please refer to the insurance requirements listed below.

Without limiting the Consultant's indemnification of, or liability to, the Santa Clara Valley Water District ("District"), 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:

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. All Certificates of Insurance complete with copies of all required endorsements must be sent to: **Contract Administrator, Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, CA 95118.**

In addition to certificates, Consultant must furnish District with copies of original endorsements affecting coverage required by this Appendix. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. **All endorsements and certificates are to be received and approved by District before work commences.** 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.

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

REQUIRED COVERAGES

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

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

General Liability insurance must include:

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

APPENDIX FOUR INSURANCE

- f. If the standard ISO Form wording for "OTHER INSURANCE," or other comparable wording, is not contained in Consultant's liability insurance policy, an endorsement must be provided that said insurance will be primary insurance and any insurance or self-insurance maintained by District, its Directors, officers, employees, agents or volunteers must be in excess of Consultant's insurance and must not contribute to it.

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:
 - (1) Certificate of Insurance shall clearly state that the coverage is claims-made.
 - (2) Policy retroactive date must coincide with or precede the Consultant's start of work (including subsequent policies purchased as renewals or replacements).
 - (3) Policy must allow for reporting of circumstances or incidents that might give rise to future claims.
 - (4) 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.

APPENDIX FOUR INSURANCE

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 and Business Automobile liability coverage naming the **Santa Clara Valley Water District, its Directors, officers, employees, and agents, individually and collectively**, as additional insureds, and must provide coverage for acts, omissions, etc. arising out of the named insureds' activities and work. Other public entities may also be added to the additional insured endorsement as applicable and the Consultant will be notified of such requirement(s) by the District.

(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. Note: Editions dated 07/04 are not acceptable)
2. **Primacy Clause:** Consultant's insurance must be primary with respect to any other insurance which may be carried by the District, its officer, agents and employees, and the District's coverage must not be called upon to contribute or share in the loss.
3. **Cancellation Clause Revision:** The Certificate of Insurance **MUST** provide **30 days notice of cancellation, (10 days notice for non-payment of premium)**. **NOTE: The standard wording in the ISO Certificate of Insurance is not acceptable.** The following words must be crossed out or deleted from the standard cancellation clause: "...endeavor to..." AND "...but failure to mail such notice must impose no obligation or liability of any kind upon the company, its agents or representatives."
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 Management Administrator.
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.
6. **Subconsultants:** Should any of the work under this Agreement be sublet, the Consultant must require each of its subconsultants of any tier to carry the coverages in accordance with the limits stated in Table IV-A, Subconsultant Insurance Requirements, attached hereto and incorporated herein by this reference, or Consultants may insure subconsultants under its own policies.
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

APPENDIX FOUR INSURANCE

liability of Consultant. Damages recoverable by the District for any liability of Consultant must, in any event, not be limited by the amount of the required insurance coverage.

8. **Coverage to be Occurrence Based:** With the exception of the Professional Liability/Errors and Omissions coverage mentioned above, all coverage must be occurrence-based coverage. Claims-made coverage is not allowed.
9. **Waiver of Subrogation:** Consultant agrees on 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, or Professional policy described in **Required Coverages** above. Consultant agrees to advise its broker/agent/insurer about this provision and obtain any endorsements, if needed, necessary to ensure the insurer agrees.
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.
11. **Please mail the certificates and endorsements to:**

**Contract Administrator
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118**

IMPORTANT: On the certificate of insurance, please note either the name of the project or the name of the District contact person or unit for the contract.

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

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TABLE IV-A
SUBCONSULTANT INSURANCE REQUIREMENTS

Firm	Project Role	General Liability		Auto Liability Limit	Professional/E&O Liability		Worker's Compensation Limit
		Per Claim	Aggregate		Per Claim	Aggregate	
URS	Environmental, CEQA, Permitting, Dam Engineering Support	\$2,000,000	\$2,000,000	\$2,000,000	\$5,000,000	\$5,000,000	\$1,000,000
Cal Engineering & Geology	Geotechnical Investigations, Geotechnical Engineering	\$2,000,000	\$2,000,000	\$2,000,000	\$5,000,000	\$5,000,000	\$1,000,000
David Ford Consulting Engineers	Hydraulics and Hydrology	\$2,000,000	\$2,000,000	\$2,000,000	\$1,000,000	\$2,000,000	\$1,000,000
DCMS (sole proprietor)	Constructability and Value Engineering	\$1,000,000	\$2,000,000	\$1,000,000	\$1,000,000	\$2,000,000	None
H.T. Harvey & Associates	CEQA and Permitting Support, Biological Impacts, HCP Compliance	\$1,000,000	\$2,000,000	\$1,000,000	\$5,000,000	\$5,000,000	\$1,000,000
JDH Corrosion Consultants, Inc.	Corrosion Engineering and Evaluations	\$2,000,000	\$2,000,000	\$1,000,000	\$5,000,000	\$5,000,000	\$1,000,000
Pacific Geotechnical Engineering	Geotechnical Investigations, Engineering Geology, Geotechnical Engineering	\$2,000,000	\$2,000,000	\$2,000,000	\$5,000,000	\$5,000,000	\$1,000,000
PHA Transportation (Pang Ho & Associates)	Traffic and Transportation Impacts	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Telamon Engineering Consultants, Inc.	Civil Engineering, CADD, Surveying	\$1,000,000	\$2,000,000	\$1,000,000	\$5,000,000	\$5,000,000	\$1,000,000
TRA Environmental Sciences, Inc	CEQA and Permitting Support, Land Use and Planning, Air Quality/GHG, Noise, Population/Housing, Recreation, Visual, HCP Compliance	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$1,000,000
Underwater Resources (UR)	Underwater Investigations	\$2,000,000	\$2,000,000	\$2,000,000	**	**	\$1,000,000

** - Not required as UR performs services as a subcontractor, no analysis performed

