

MODIFICATION NUMBER 13 TO CONTRACT AE18-034

Contract Title: Matilija Dam Removal 65% Design Planning Project

This modification ("Modification No. 13") is made and entered into by and between the Ventura County Watershed Protection District, hereinafter referred to as AGENCY, and AECOM, hereinafter referred to as CONSULTANT.

WHEREAS, there now exists a binding contract between AGENCY and CONSULTANT ("CONTRACT") originally entered into on 02/26/2018 for the CONSULTANT to provide engineering services to develop 65% designs to remove Matilija Dam in a manner that would reduce the impact of impounded sediment while minimizing costs and time associated with dam removal with a total contract amount of \$822,302.00, and a contract completion date of 07/11/2019; and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 07/25/2018 for the CONSULTANT to provide biological clearance surveys and compliance monitoring in support of field investigations to comply with California Department of Fish and Wildlife (CDFW) requirements for an additional contract amount of \$16,898.00 ("MODIFICATION NO. 1"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 07/25/2019 to extend the CONTRACT completion date to 11/30/2019 ("MODIFICATION NO. 2") due to a delay initiated from the acquisition for regulatory permits required for the filed investigations; and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 12/26/2019 to add additional tasks for the CONSULTANT to review and update the 2004 Real Estate Plan prepared by the USACE for an additional contract amount of \$53,375.00 and to extend the CONTRACT completion date to 06/30/2020 ("MODIFICATION NO. 3"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 02/27/2020 to add additional tasks to the CONTRACT for the CONSULTANT to assess possible short-term impacts caused by the flushing of fine sediment from the Project on downstream water supply infrastructure and identify and evaluate the potential water supply mitigation alternatives for an additional contract amount of \$32,769.00 ("MODIFICATION NO. 4"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 07/28/2020 to add additional tasks to the CONTRACT to address concerns regarding the potential long-term impacts to the operation of Casitas Municipal Water District's Robles Diversion Facility caused by increased sediment delivery following the removal of Matilija Dam. CONSULTANT shall review background information, evaluate relevant case studies, formulate alternative options, conduct a workshop and prepare a final report for and additional contract amount of \$79,488.00 and to extend the CONTRACT completion date to 12/31/2020 ("MODIFICATION NO. 5"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 12/23/2020 to add additional tasks to 1) address concerns regarding downstream impacts from sediment deposition after the dam is removed by completing additional detailed hydraulic modeling and analysis using 2-dimensional (2D) methods and completing a screening level assessment of bank erosion, and 2) advancing the design of the removal of Matilija Dam from 10 percent to 30 percent, and 30 percent to 65 percent for an additional contract amount of \$683,901.00 and to extend the CONTRACT completion date to 03/31/2022 ("MODIFICATION NO. 6"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 2/8/2022 to 1) expand the limits of the previously completed 2-dimensional (2D) modeling work and to add greater detail to the results for property and infrastructure protection planning prior to dam removal, and; 2) revise the results of analyses completed under several Phase 1 subtasks as informed by the additional 2D modeling for an additional contract amount of \$85,100.00 and to extend the CONTRACT completion date to 06/30/2022 ("MODIFICATION NO. 7"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 2/8/2022 to 1) coordinate review of potential issues relevant to the public, 2) respond to public comments received during the public review of the draft Supplemental Environmental Impact Report (SEIR), 3) provide minor revisions to the design documents in response to public comments received, 4) participate in public meetings and conduct monthly update meetings remotely, and 5) provide project management and quality assurance/quality control during the execution of these tasks for an additional contract amount of \$37,400.00 and to extend the CONTRACT completion date to 06/30/2023 ("MODIFICATION NO. 8") ; and

EXHIBIT 14

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 4/13/2023 to perform additional 2D sediment transport modeling and model validation to assess modeling sensitivity to the inclusion of fine grained sands and increasing the rate of sediment evacuation from the reservoir by 30% for an additional contract amount of \$179,000.00 and to extend the CONTRACT completion date to 12/31/2023 ("MODIFICATION NO. 9"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 6/8/2023 for the CONSULTANT to 1) advance the structural analyses and structural design for the proposed orifices either by a controlled blasting to remove concrete "plugs" left intact at the upstream end of the orifices, or by opening gates installed at the downstream end of the orifices to the 30 percent level, 2) coordinate design development with the California Department of Safety of Dams review of the project, 3) document the design development and conclusions in a Design Memorandum and 4) provide project management and quality assurance/quality control during the execution of these tasks; for an additional contract amount of \$128,661.00 ("MODIFICATION NO. 10"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 8/7/2023 to extend the CONTRACT completion date to 3/31/2024 ("MODIFICATION NO. 11") due to review, comment oversight and approval of work in Modification 9 by the National Marine Fisheries Service, the U.S Bureau of Reclamation, and the Matilija Dam Ecosystem Restoration Project (MDERP) Small Sediment Subgroup and the review and approval of work in Modification 10 by the California Department of Safety of Dams ("MODIFICATION NO. 11"); and

WHEREAS, AGENCY and CONSULTANT entered into a written modification to CONTRACT on 1/10/2024 for the CONSULTANT to perform a 2D sediment transport model of a single 10-year storm event, representative of a "Qualifying Event" to determine the limits of sediment deposition and water inundation from the Qualifying Event; for an additional contract amount of \$11,000.00, to extend the CONTRACT completion date to 6/30/2024 ("MODIFICATION NO. 12"); and

WHEREAS, AGENCY and CONSULTANT desire to modify the terms of the Contract to extend the contract completion date to 12/31/2025 to complete items of work related to public review of the draft Supplemental Environmental Impact Report (SEIR) set forth in Modification No. 8; The total contract amount remains unchanged at \$2,129,894;

NOW THEREFORE, the parties hereto agree as follows:

1. All provisions of the Contract, including all previous modifications shall remain in full force and effect unless expressly modified by this Modification No. 13.
2. Exhibit A (Scope of Work and Services) is modified as follows:
No changes to Exhibit A.
3. Exhibit B (Time Schedule) is modified as follows:
Replace Exhibit B with the attached Modification No. 13 Exhibit B.
4. Exhibit C (Fees and Payment) is modified as follows:
No changes to Exhibit C.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE EXECUTED THIS MODIFICATION.

FOR CONSULTANT

Name: _____ Date _____

Title: _____

FOR AGENCY:

Name: _____ Date _____
Interim County Engineer

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EXHIBIT B - TIME SCHEDULE

1. Schedule

All Work on this contract shall be completed by **12/31/2025**.

CONSULTANT shall complete intermediate tasks as follows:

Task Table

Task	Description	Due Date
1	Field Investigations	
1.1	Geotechnical Field Investigations to Characterize Fine Sediment and Organics	07/07/2018
1.2	Field Investigations to Characterize Dam Concrete	07/07/2018
1.3	Field Investigations Memorandum	08/30/2018
1.4	Biological Support for Field Investigations	09/15/2018
2	Dam Removal Feasibility Study	
2.1	Structural Evaluation of Dam With and Without Orifices	03/13/2020
2.2	Detailed Sediment Transport Modeling From Dam to Ocean	01/31/2020
2.3	Hydraulic Studies to Determine 100-yr Water Surface Elevation Based on Detailed Sediment Transport Analyses	3/31/2021
2.4	Re-evaluation of Downstream Project Components	03/30/2020
2.5	Predictability Assessment of Flushing Storm Event	01/31/2020
2.6	Update Dam Removal Concept To 10 Percent Design	04/24/2020
2.7	Updated Dam Structural Analysis	03/13/2020
2.8	Dam Removal Feasibility Study Report	03/30/2020
2.9	Detailed 1D and 2D Modeling	3/31/2021
2.10	Bank Erosion Screening Level Assessment	4/30/2021
2.11	Refine and Extend SRH-2D Modeling	4/15/2022
2.11.1	Upstream Model	4/15/2022
2.11.2	Downstream Model	4/15/2022
2.12	Phase 1 Task and Subtask Rework	4/15/2022
2.12.1	Review of the Revised Sediment Transport Analysis	4/15/2022
2.12.2	Merge Revised Sediment Transport Data with the Prior Geographic Information System (GIS) Database	4/15/2022
2.12.3	New GIS Maps of the Study Area	4/15/2022
2.12.4	New Maps Comparison to Prior Studies and Evaluate Resulting Changes	4/15/2022
2.12.5	Update Findings and Recommendations in the Prior Reports and Technical Memoranda for Subtasks 2.4, 2.9, 3.3 and Task 4	4/15/2022
2.12.6	Draft and Final Reports	4/15/2022
3	Review and Update Real Estate Plan	
3.1	Review USACE Real Estate Plan	01/01/2020
3.2	Development of Real Estate Plan/Downstream Project Component Decision Matrix	2/29/2020
3.3	Update Real Estate Plan	4/15/2022
4	Impacts to Water Supply Infrastructure	
4.1	Short-Term Impacts Alternatives Refinement	8/31/2020
4.1.1	Data Review	5/31/2020
4.1.2	Analysis of Short-Term Impacts to Water Supply Agencies	6/30/2020
4.1.3	Development of Conceptual Alternatives	7/31/2020
4.1.4	Coordination with Water Supply Agencies	8/31/2020
4.1.5	Refinement of Alternatives	8/31/2020
4.2	Long-term Impacts Alternative Options Study (Robles Diversion)	9/30/2020
4.2.1	Background and Operational Review	7/31/2020

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Task	Description	Due Date
4.2.2	Case Study Evaluation	8/31/2020
4.2.3	Preliminary Evaluation and Draft Summary Report	9/30/2020
4.2.4	Workshop and Final Summary Report	4/15/2022
5	30 Percent Design	
5.1	30 Percent Plans	6/30/2021
5.2	Monitoring and Adaptive Management Plan	7/31/2021
5.3	30 Percent Design Report	6/30/2021
6	65 Percent Design	
6.1	65 Percent Plans	6/30/2023
6.2	Project Cost Estimate and Specifications Inventory	3/15/2022
6.3	65 Percent Design Report	6/30/2025
6.4	SEIR Support and Meetings	6/30/2025
6.5	2D Sediment Model Sensitivity	
6.5.1	Develop New Sediment Supply Rating Curves	12/29/2023
6.5.2	Update SRH-2D Coarse Model and Upstream Fine Model	3/31/2024
6.5.3	Coordination During Model Development and Interpretation	3/31/2024
6.5.4	Conduct Additional Model Runs to Assess the Sensitivity of Sediment Supply Rates	3/31/2024
6.5.5	Draft 2D Sediment Model Sensitivity Report	3/31/2024
6.5.6	Contingency Model Runs and Report	12/31/2024
6.5.6.a	Contingency Model Run No.1	12/31/2024
6.5.6.b	Contingency Model Run No.2	12/31/2024
6.5.6.c	Contingency Model Run No.3	12/31/2024
6.5.7	Final 2D Sediment Model Sensitivity Report	12/31/2024
6.6	Ten-year Recurrence Interval Storm Model Run Using SRH-2D	1/18/24
7	Final Report	12/31/2024
8	Structural Analyses and 30% Structural Design of Orifices	3/31/2024
8.1	Review Previous Structural Evaluations	3/31/2024
8.2	Structural Assessment of Orifice Tensile Stress Concentrations and Mitigation Option(s)	3/31/2024
8.3	Assessment of Controlled Blasting Approach	3/31/2024
8.4	Structural Design of Anchors and Regulating Gates	3/31/2024
8.5	Analysis of Hydraulic Conditions During Flushing	3/31/2024
8.6	30% Design of Concrete Plugs and Orifice Tensile Stress Mitigation Measures	3/31/2024
8.7	Prepare Draft Technical Memorandum	3/31/2024
8.8	Prepare Final Technical Memorandum	3/31/2024
8.9	Coordination With DSOD	12/31/2024
8.10	Task Management	12/31/2024

2. Delays

If Work cannot be completed by the dates specified in Exhibit B through no fault of CONSULTANT, the fee for the Work not then completed may be adjusted to reflect increases in cost which occur, due to delay, from the date that the Work was required to be complete as specified in Exhibit B until the time the Work can actually be completed. Any payment of an additional fee as described in this paragraph must be authorized by AGENCY with a modification to this contract.

End of Exhibit B