EXHIBIT 2-A

TETRA TECH

Memorandum

Monterey Peninsula Water Management District

Sleepy Hollow Steelhead Rearing Facility

Rearing Channel and Quarantine Tank Maintenance Upgrades

July 12, 2021

This document outlines Tetra Tech's proposed scope of work for the Monterey Peninsula Water Management District (MPWMD) Sleepy Hollow Steelhead Rearing Facility (SHSRF) Rearing Channel and Quarantine Tank Maintenance Upgrade project. This scope of work is to design and prepare construction documents for the upgrades.

The anticipated schedule shown in Table 1 is intended to complete design and bid the project this fall. An engineering budget estimate for Tetra Tech's scope of work is included in Table 2. For additional information about this scope of work or the price proposal, please contact Darrel Nice at (509) 944-1681.

PROJECT UNDERSTANDING

MPWMD staff designed the SHSRF in the early 1990s to hold juvenile steelhead rescued from the lower Carmel River during the low flow periods. Construction began in 1995 and was completed in 1996. The first fish were received in late 1996. Improvements to the screened intake and addition of water recirculation was designed in 2018 and built in 2020. These improvements supply up to 1,350 gpm of either river water, treated water, or recirculated water to the rearing channel. This proposed project will make upgrades to the rearing channel and quarantine tanks, which are described below.

The primary fish-rearing capacity of the facility is in the natural rearing channel. The 800-foot long channel has 17 pairings of 6-foot-wide riffle and 9-foot-diameter pool sections. The approximate gross volume of the channel is 14,900 cubic feet; however, the channel is filled with cobble in almost all riffle sections, reducing the fish rearing volume significantly. It is estimated that the fish rearing volume is only 4,000 cubic feet (30,000 gallons). The facility also includes two large holding tanks (22- and 30-foot diameter), eight insulated fiberglass rearing troughs, and six 8-foot-diameter quarantine/holding tanks. These tanks are used for initial quarantine and subsequent rearing of steelhead to increase the size of fish before they are stocked into the mixed-size population in the natural rearing channel. Quarantine tanks are used at any time during the operating season.

Generally, the facility operates from early summer to late fall/early winter, depending on river flow and weather conditions. Once flow returns to the lower river, MPWMD staff recapture, count and release the fish back to the river.

Improvements to the facility as part of this project will address the areas described below.

- Rearing Channel upgrades to the pool and riffle sections will:

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- Remove Hypalon liner
- Excavate native material bottom
- Pour concrete bottom slab
- Install new liner
- Replace top boards
- Leakage test

- Quarantine Tank upgrades will

  - Remove and salvage wood decking
  - Demolish air, water, and drain plumbing; disconnect electrical service
  - Remove quarantine tanks; MPWMD staff will provide repaired or replaced tanks
  - Inspect electrical installation for chillers and bring up to current code (if not in compliance)
  - Remove existing chillers and replace with a single chiller capable of lowering water temperature up to approximately 10 degrees (TBD through calculations)
  - Excavate and dispose native material under the existing tanks
  - Import, compact, and test new gravel base material
  - Pour reinforced concrete base slab for each tank
  - MPWMD staff will provide tanks with a new steel, aluminum or FRP support frames for contractor to reinstall tanks
  - Layout and connect new air, water, and drain plumbing and electrical. Connections above the decking or in an easily accessible enclosure box
  - Reinstall decking
  - Test all components

Construction of these improvements is estimated by MPWMD to cost between $250,000 to $500,000.

SCOPE OF WORK

Tetra Tech proposes to execute the scope of work with the following tasks:

- Task 1—Project Management
- Task 2—Basis of Design
- Task 3—Drawings (30% through 100%)
- Task 4—Specifications and Bid Document Assistance
- Task 5—Optional Tasks

Task 1—Project Management and QA/QC

Darrel Nice will be Tetra Tech's project manager for the duration of the project providing management and oversight of the consultant project team. Darrel will monitor budgets, schedule, invoicing, and personnel assignments, and ensure that work performed is within the contract scope, schedule, and budget.

Tetra Tech's key engineers will be Erik Nordholm for site infrastructure and Ryan Maas for structures. Tetra Tech will establish weekly internal project meetings to ensure that the project is on task and on schedule. Before any other work is done, Tetra Tech will formalize this SOW into a work plan for internal use that includes the following:

- **Introduction**—Project purpose, background, and work plan organization
- **Project Team**—Team contact information, organization

- **Project Communication**—Network file information, external communication, written correspondence, email correspondence, telephone communications, meetings, confidentiality, file structures, project tracking forms (action item list, etc.)
- **Scope of Work**—Description of work to be conducted for the project
- **Schedule**—Project schedule requirements and tasks
- **Budgets and Cost Codes**—Internal financial tracking information and estimated monthly billing cash flow
- **Quality Control Plan**—Quality assurance/quality control team members and schedule
- **Health and Safety**—Safety information while on site or at MPWMD facilities
- **Project Deliverable Standards**—CAD Standards, template standards for technical memorandums and reports, specification standards, and cost estimating

Tetra Tech proposes to hold one-hour project coordination meetings every two weeks with MPWMD identified key personnel. These meetings will discuss project tasks completed to date, current project tasks, and two-week work projections. The meetings will review action items and identify outstanding items as well as new items required for future work tasks. Tetra Tech will email a summary of any key topics discussed during the meeting.

Tasks identified in this SOW will be subdivided to provide sufficient detail to determine workload completed to date, interim project tasks, and future tasks to be completed. In conjunction with the project update meeting, Tetra Tech will prepare monthly progress letters for submittal to MPWMD's project manager. The letter will include a summary of work for the preceding month and related costs shown in an attached invoice.

This task is based on the following assumptions:

- Project management for design phase will be for a period of 4 months.
- Tetra Tech will participate in a one-hour progress meeting by telephone twice per month during design.
- Tetra Tech has not included face-to-face meetings.
- Quality Assurance and Quality Control review by a senior fishery and a structural engineer is included in this project management task.

Task 2—Basis of Design

A review meeting will be held with MPWMD and Tetra Tech staff to develop project objectives. Based on information gathered in the meeting Tetra Tech will prepare a design criteria for each component to be upgraded. Tetra Tech will prepare a memorandum that includes the design criteria and written description of the upgrades that will be designed and included in the drawings and specifications. The memorandum will be reviewed by MPWMD prior to proceeding with drawing and specification tasks.

This task is based on the following assumptions:

- Existing drawings of the facility were previously provided to Tetra Tech.
- A sketch and photos of the prototype rearing pool improvement previously built will be provided by MPWMD.
- Where not available on record drawings, MPWMD will provide photos of existing pipes, chillers, electrical outlets, panels, wiring, conduits, and any other items to be included in the upgrades.
- MPWMD will conduct a virtual site tour to review and answer any questions for Tetra Tech's civil, structural, and electrical designers.
- Deliverables will be in electronic format.

Deliverables associated with this task are:

- Project Description and Design Criteria Memorandum

Task 3—Drawings

Tetra Tech will prepare drawings for review by MPWMD. Drawings will be submitted at 30%, 60%, and 100% completion levels. After review of the 100% drawings and all comments have been received, Tetra Tech will make final edits and seal the drawings. The following drawings are anticipated for the final bid set:

- Cover Sheet
- General Notes, Symbols, and Legends
- Standard Details
- Site Plan
- Tank Area Enlarged Plan
- Tank Area Piping Plan
- Tank Area Sections and Details
- Structural Notes
- Rearing Pool Enlarged Plan
- Rearing Pool Section and Details
- Rearing Pool Section and Details
- Electrical Symbols and Abbreviations
- Electrical Details and Schedules
- Electrical One-Line Diagram
- Electrical Site Plan
- Electrical Enlarged Plan

Tetra Tech will provide equipment cut sheets for fish process systems including channel liner, pipes, valves, enclosures, electrical outlets, and chiller.

This task is based on the following assumptions:

- A central chiller will replace the 5 - 1.1 HP chillers and power supplied from the main switchboard.
- Quarantine tank piping will be schematic and allow field fit with a typical detail provided for connections.
- Pool and riffle drawings will use typical details for excavation, shoring, drain, anchoring liner, and new concrete.
- Drawings will be prepared in AutoCAD using Tetra Tech drafting standards.
- Drawings will be sealed by a California licensed professional engineer.
- Deliverables will be in electronic PDF format.

Deliverables associated with this task are:

- 30% Drawings – A reduced set of 4 drawings showing plan view of upgrades.
- 60% Drawings – A nearly complete set of 16 drawings showing plan view, sections, and details for civil, structural, and electrical disciplines.
- 100% Drawings – A complete set of 16 drawings showing plan view, sections, and details for civil, structural, and electrical disciplines.
- Stamped drawing package for bidding purposes.

Task 4—Specifications and Bid Document Assistance

Tetra Tech will prepare design documents including calculations, specifications, and cost estimates for submittal and review by MPWMD. Design documents will be developed and submitted at 30%, 60%, and final design level.

include drawings, specifications, and cost estimates developed to a final design level. Calculations and specifications will be sealed by a California licensed professional engineer for MPWMD use in permit applications and bidding. Comments from design reviews will be incorporated.

Specifications will be prepared by Tetra Tech for earthwork, grading, liner, concrete, metal fabrications, wood materials, pipes, valves, chiller, and electrical.

This task is based on the following assumptions:

- Specifications Division 1 through Division 17 will be prepared based on Tetra Tech's previous design work at Sleepy Hollow.
- Tetra Tech's in-house standards specifications will be used where different than previous Sleepy Hollow design work.
- General Provisions will be provided by MPWMD for Tetra Tech review.
- Final cost estimates will be an onion of probably construction cost to a Class 2 level.

Deliverables associated with this task are:

- 30% Documents – Technical specification table of contents and cost estimate outline.
- 60% Documents – Standard technical specifications, calculations, and construction cost estimate.
- 100% Drawings – Edited technical specifications and updated construction cost estimate.
- Specification signed and sealed in PDF format for bidding purposes.

Task 5—Optional Tasks

Task 5.1 Biological Review

Water temperature and flow volume in the rearing channel are critical aspects of operations. Air temperature fluctuates diurnally and the effectiveness of the cooling tower also fluctuates and can warm incoming flows when temperature and humidity are too high. Tetra Tech would assist with analysis and optimization of the existing cooling operation in the rearing channel. This would involve analyzing the rate and temperature of incoming flows, cooling tower effectiveness, and various percentages of recirculated flow to determine the optimum rates and timing for use of the cooling tower along with amount of river flow and amount of recirculation flow. A wet bulb temperature sensor has been added since construction to the cooling tower and sensors for temperature of inflow and outflow water are installed. These sensor provide temperature data on a nearly continuous basis via the Programmable Logic Controller (PLC) that transmits data remotely to MPWMD. The intent of this task is to develop a operational plan to automate use of the cooling tower through the PLC. The desired flow rate to the rearing channel is user selected and can be changed remotely. On the other hand, the percent of recirculated flow is set manually.

A Tetra Tech fisheries biologist would work with MPWMD staff and the control integrator consultant (Telemetrix) to determine how to achieve optimum habitat conditions for steelhead. In addition to the air/water temperature and mixed flow aspects of operations, a new UV unit has been installed to control disease outbreaks. Water temperature and disinfection need to be analyzed together as methods to control disease and possibly allow the steelhead to survive in higher temperature water.

Task 5.2 Permitting Support

The Sleepy Hollow facility has recently gone through two CEQA actions and the proposed work is maintenance of an existing facility, the construction work would be CEQA exempt. A Monterey County permit may be required for new electrical work. Tetra Tech would support MPWMD preparation of permit applications with descriptions of the work and drawings already prepared in Task 3.

Task 5.3 Bidding Support

Tetra Tech will provide bidding phase support. Budget for bidding phase is an estimated budget allowance and may be adjusted depending on amount and level of bidder questions.

Tetra Tech will participate in an MPWMD advertised and facilitated meeting, comprising one Pre-Bid meeting, where Tetra Tech will be available to answer questions from plan holders and interpret design intent. Tetra Tech will assist MPWMD in responding to written questions from bidders for clarification and interpretation of the bidding documents. All written and verbal communications will be documented by MPWMD and sent to a single point of contact for coordinating information and expediting responses from the Tetra Tech engineering disciplines. The pre-bid conference will be attended by the project manager.

This task is based on the following assumptions:

- Assistance is limited to budget established for pre-bid conference and bidding.
- Answers to bidder questions is limited to written clarifications. No revised drawings are required.
- Preparation of conformed documents is not required or included in the budget.

Task 5.4 Construction Phase Support

Tetra Tech will provide construction phase support that include construction phase, project startup, and project closeout. Budget for construction phase support is an estimated budget allowance and may be adjusted depending number of RFIs and submittals.

Construction Phase

During construction, Tetra Tech will support MPWMD with administration of the construction contract. Tetra Tech will attend by teleconference a preconstruction meeting and approximately four construction status meetings to stay informed of progress, quality of work, compliance with contract documents, and support MPWMD's project manager. In addition to attending meetings, Tetra Tech will review weekly site visit photos and inspection reports supplied by MPWMD.

Requests for information (RFI) sent by MPWMD will be logged and routed to appropriate design staff for review and response. RFIs will be returned to MPWMD within two working days from date of receipt by Tetra Tech. If Tetra Tech and MPWMD agree that the RFI is more complex and could impact schedule or cost, more time will be requested to make a response. Review of 8 RFIs for Tetra Tech design items is anticipated.

Submittals sent by MPWMD will be logged and routed to appropriate design staff to take action on shop drawings, product data, samples, and other components of the contract documents. Submittals will be returned to MPWMD within 10 working days from date of receipt by Tetra Tech. Review of 8 submittals for Tetra Tech design items is anticipated.

Project Startup and Closeout

Project startup and closeout services will be initiated upon notice from the contractor that construction work is substantially complete, allowing MPWMD to operate the project. Tetra Tech will make a site visit to observe that equipment functions as designed and that the operating staff have been given adequate instruction for operating the equipment. During project startup a walkthrough inspection of the project with the contractor and MPWMD staff to verify conformity with the contract documents and that construction items are completed. Tetra Tech will work with MPWMD to prepare a punch list of any nonconforming or unfinished items observed during the inspection. Tetra Tech will review the contractor's drawing markup field records, operations manuals, and closeout paper work sent by MPWMD.

This task is based on the following assumptions:

- No weekly progress meetings are required to be attended by Tetra Tech.
- MPWMD will coordinate submittals with the general contractor and confirm that they are clear, organized, and complete prior to sending to Tetra Tech.
- No budget for change orders is included.
- Contractor will submit one complete O&M manual and Tetra Tech will provide one review with written comments within three weeks of receipt from MPWMD.
- Preparation of record drawings in AutoCAD format is not required.
- Tetra Tech will make one site for project closeout and startup.

SCHEDULE

Table 1 presents a summary of the anticipated project schedule. Dates shown are completion dates for the task unless otherwise noted.

Table 1. Project Schedule

Project Milestone [a]	Completion Date
Notice to Proceed	8/2/2021
Project Startup Meeting	8/9/2021
Basis of Design	8/27/2021
30% Drawings and Specifications	9/3/2021
60% Drawings and Specifications	9/24/2021
100% Drawings and Specifications	10/22/2021
Bidding Assistance	11/1/2021 to 11/19/21
Begin Construction Phase Support	12/6/2021

a. Submittals anticipate a 1 week MPWMD review period.

The schedule assumes a one-week MPWMD review period for each submittal. Tetra Tech, with MPWMD assistance, will organize project startup, deliverables, and review meetings based on this schedule and receiving notice to proceed from MPWMD. Billing will be associated with progress on each task; pay schedule will generally correspond to major divisions in the schedule.

BUDGET

Table 2 summarizes the budget estimate for each task of the work effort. Project payment is based on the tasks in this SOW and will be invoiced monthly based on level of completion associated with the work performed for each task, with a not-to-exceed budget of $61,338 for basic tasks. Optional tasks are shown that can be added when desired.

Optional tasks have been given a budget allowance that can be added to the contract if necessary. This budget is approximate and will be revised before amending the contract. It is given now for MPWMD budget planning.

Table 2. Project Budget

Task No.	Description	Basic Tasks Budget	Optional Tasks Budget	Total Task Budget
Task 1	Project Management & QA/QC	$5,322		$5,322
Task 2	Basis of Design	$12,459		$12,459
Task 3	Drawings	$32,736		$32,736
Task 4	Specifications and Bid Documents	$10,821		$10,821
Task 5	Optional Tasks			
Task 5.1	*Biological Review*		$9,946	$9,946
Task 5.2	*Permitting Support*		$5,138	$5,138
Task 5.3	*Bidding Support*		$3,744	$3,744
Task 5.4	*Construction Phase Support*		$17,806	$17,806
Subtotal Basic Tasks		**$61,338**		
Subtotal Optional Tasks			**$36,634**	
Total				**$97,972**