

This is **EXHIBIT A**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated June 1, 2017.

Task Order

Task Order Number: 17

Date: 2/4/2022

Title: Pilot Study 4

Project Description: Provide professional and field services related to performing a bench and pilot study for the removal of iron, manganese, and phosphorus from Well 2.

The Master Services Agreement is amended and supplemented to include the following agreement of the parties.

PART 1 – SERVICES

Task 1 – Bench Test

Objective

Provide bench testing services to identify the ideal chemical compounds and dosages required for maximum contaminant removal.

Approach

The following approach applies:

- Farr West will partner with WesTech to test various oxidants, coagulants, and pH adjustments related to the subsequent pilot study and eventual full scale treatment facility design.
- Water samples from Well 2 will be transported via 5-gallon buckets to the District garage for testing activities.

Deliverables

No formal deliverables will be associated with this task:

Assumptions

The following assumptions apply:

- WesTech will be provided space to setup an 8-foot folding table to conduct testing on.
- The District will provide a precision analytical balance, drying oven, dessicator, and vacuum filtration kit for use by WesTech for three (3) days.
- All subconsultant costs are subject to Farr West's standard markup of 15%.
- Data and findings from the bench test will be used to determine approach and materials used for the pilot study and will be referenced in the final pilot study report.

Task 2 – Pilot Study

Objective

To conduct a pilot study for a treatment system which uses manganese dioxide media to remove iron, manganese, and phosphorus below maximum contaminant levels or to support the eventual removal of arsenic from the source water at Well 2.

Approach

The following approach applies:

- DeNora will provide a pilot skid and associated equipment to conduct the pilot study.
- Farr West will install all equipment and chemical containers in the Well 2 well house.
- Farr West will work with District staff to reduce the speed of the Well 2 pump to provide approximately 6 gpm to the treatment skid.
- All “treated” water will be discharged into the floor drain in Well 2 which discharges beyond the 13th fairway.
- Farr West staff will be on-site to conduct all testing and backwash activities.
- All samples will be collected and transported by Farr West to a certified laboratory for analysis.
- Farr West will prepare a summary report documenting the findings and results of the pilot study for submission to the State Water Resources Control Board.

Deliverables

The following will be delivered under this task:

- Draft Pilot Study Report
- Final Pilot Study Report

Assumptions

The following assumptions apply:

- All equipment and supplies will be stored for a 3-week period in the Well 2 well house.
- District staff will assist with well operation (turn on/off and speed up/down) or provide proper training for Farr West staff to operate.
- If adequate constituent removal is not achieved after the second week of the study, Farr West may delay the schedule to determine the appropriate changes in treatment approach.
- While Arsenic is the primary constituent of concern for the water system, this pilot study will focus on the removal of iron, manganese, and phosphorus so that Arsenic can be removed via an adsorptive process in a 2nd stage of treatment.
- Raw Water from Well 2 will be used to conduct all backwash activities.
- This task includes services incurred to develop the pilot protocol and pilot study approach.

PART 2 – COMPENSATION

The District shall pay Farr West on a time and expense basis, including travel, not to exceed Ninety-Four Thousand Dollars (\$94,000.00). Hourly rates and other expenses shall be in accordance with Exhibit C of the Master Services Agreement (Standard Hourly Rates). A breakdown of the individual task budgets is as follows:

Task 1	Bench Test	\$9,000
Task 2	Pilot Study	\$85,000
	TOTAL:	\$94,000

PART 3 – SCHEDULE

The following is a proposed schedule to be used as a general guideline only.

Notice to Proceed:

February 9, 2022

End of Contract:

June 30, 2022

IN WITNESS WHEREOF, the parties hereto have executed this Task Order.

Owner: Plumas-Eureka Community Services District

Engineer: Farr West Engineering

By: _____

By:  _____

Print Name: John Rowden

Print Name: Lucas R. Tipton, P.E.

Title: General Manager

Title: Principal Engineer

Date
Signed: _____

Date
Signed: 2/4/22