

**AMENDMENT TO
Contract for Professional Services
Mission Springs Water District
66575 Second Street
Desert Hot Springs, CA 92240
Telephone 760-329-6448 – FAX 760-329-2482**

TO: West Yost & Associates, Inc.
2020 Research Pk. Dr. Ste. #100
Davis, CA 95618

DATE: _____

PROJECT DIR#: N/A

THIRD AMENDMENT TO CONTRACT AGREEMENT

1. This amendment (the "Amendment") is hereby made by Mission Springs Water District and **West Yost Associates, Inc.** parties to an agreement for **Horton Phase I Nitrogen Control Strategy Implementation** (the "Agreement"), dated **March 1, 2022**.
2. In exchange for the promises herein and other good and valuable consideration, the sufficiency of which both parties acknowledged, it is mutually agreed by and between the undersigned contracting parties that the Agreement is amended as follows:

This Contract Amendment will increase the amount of the Contract Agreement from a Not to Exceed amount of \$181,306.00 to a Not to Exceed amount of 266,006.00 per Attachment 1. This Contract Amendment will increase the term of the Contract Agreement from January 31, 2024, to January 31, 2025.

3. Except as set forth in this Amendment, the Agreement is unchanged and shall continue in full force and effect in accordance with its terms. If there is conflict between this Amendment and the Agreement the terms of this amendment will prevail.

Instructions: Sign and return via email. Upon acceptance by Mission Springs Water District, an executed copy will be returned to you for your records. Insert the names of your authorized representative(s) below.

Accepted:

Mission Springs Water District

Consultant:

West Yost & Associates, Inc.
(Business Name)

By: _____
Brian E. Macy, PE

Title General Manager

By: _____
Elizabeth T. Drayer

Title Vice President

Other authorized representative(s):

Eric Weck
Engineering Manager

Other authorized representative(s):

ATTACHMENT 1



23692 Birtcher Drive
Lake Forest CA 92630

949.420.3030 phone
530.756.5991 fax
westyost.com

March 12, 2024

SENT VIA: EMAIL

Brian Macy
Assistant General Manager
Mission Springs Water District
66575 2nd Street
Desert Hot Springs, CA 92240

SUBJECT: Proposal for Technical Support Services for the Alan L. Horton Wastewater Treatment Plant Phase I Nitrogen Control Strategy Implementation

Dear Mr. Macy:

Pursuant to your request, West Yost is pleased to present this letter proposal to provide the Mission Springs Water District (MSWD) with a proposed scope of services, budget, and schedule to provide technical support services related to the implementation of a Nitrogen Control Strategy for the Alan L. Horton Wastewater Treatment Plant (WWTP). This letter specifically describes a proposed scope of services, budget, and schedule for the implementation of Phase I of the work plan described in the WWTP Nitrogen Control Strategy Technical Report (Technical Report), which was prepared by West Yost for the MSWD in April 2023.

BACKGROUND

The Technical Report, which was prepared pursuant to Waste Discharge Requirements Order R7-2022-0008 (Permit), was approved by the Colorado River Regional Water Quality Control Board (Regional Board) in September 2023. In accordance with the Permit, the Technical Report provided two key elements:

- A work plan to achieve an effluent limitation for total nitrogen of 10 milligrams per liter (mg/L) or lower of treated wastewater discharged to the WWTP percolation ponds.
- A time schedule for any WWTP improvements or other activities necessary to achieve the proposed effluent limitation.

The Technical Report specifically included implementation actions for the following four technical elements:

- Near-term WWTP optimization
- Soil nitrogen removal evaluation
- Background groundwater monitoring
- Define and implement final compliance strategy

The study is expected to be completed in 2027 coincident with completion of the Coachella Valley Salt and Nutrient Management Plan (CV-SNMP)¹. As discussed with MSWD staff, implementation of the work plan is recommended to be completed in a phased approach. The tasks and timeline associated with the first phase of the evaluation that were proposed in the Technical Report are shown in the table below.

Table 1. Phase 1 WWTP Nitrogen Control Study Tasks and Timeline				
Task	Responsible Party	Task Duration	Start Date	Completion Date
WWTP Optimization Tasks				
Evaluate data collected and further develop operational recommendations	West Yost	3 months	January 2024	March 2024
Complete installation of recommended flow meters	MSWD	6 months	January 2024	June 2024
Groundwater Evaluation Tasks				
Soil Nitrogen Removal				
Evaluate data collected and further develop recommendations for lysimeter installation to support Phase 2 of the soil nitrogen removal evaluation	West Yost	4 months	January 2024	April 2024
Install shallow lysimeters	West Yost & MSWD	3 months	May 2024	July 2024
Background Groundwater Monitoring				
Evaluate background groundwater monitoring strategies	West Yost	4 months	January 2024	April 2024
Monitoring Well Installation Workplan (if needed)	West Yost	2 months	May 2024	June 2024
Approve Monitoring Well Installation Workplan (if needed)	Regional Board	2 months	July 2024	August 2024

SCOPE OF SERVICES

The following is a list of the key tasks necessary to perform the proposed Scope of Services for Phase I of the work plan, each further described below:

- Task 1. WWTP Optimization Support
- Task 2. Monitoring Nitrogen Removal During Percolation through Soil Aquifer Treatment
- Task 3. Evaluate Background Groundwater Monitoring Well
- Task 4. As-Needed Support
- Task 5. Project Management

¹ The objective of the CV-SNMP will be to sustainably manage salt and nutrient loading in the Coachella Valley Groundwater Basin (Basin) in a manner that protects its long-term beneficial uses. It is anticipated that the outcome of this work will be a clarification on what additional protections are needed with respect to discharges from all dischargers within the basin, including the Horton WWTP, to protect the beneficial uses of groundwater in the Coachella Valley.

Task 1. WWTP Optimization

The optimization approach for the WWTP involves operating the WWTP oxidation ditch facilities in a simultaneous nitrification/denitrification (SND) mode. To date, MSWD staff had initiated SND operation in two of the five oxidation ditches at the WWTP, and evaluation of the data collected to date demonstrates improvements in process control and nitrogen removal. Moreover, MSWD is nearing the completion of construction of a new Membrane Bioreactor (MBR) facility that will significantly reduce the flows being directed to the WWTP. Indeed, with the completion of the MBR project, it is expected that the three oxidation ditches that are not currently operating in SND mode will be taken offline.

Given the near-term timeline for completion of the MBR project, it is recommended that MSWD pause on further optimization until startup of the new MBR facility is complete. Therefore, it is expected that optimization support during Phase 1 will primarily be limited to supporting MSWD SND operations through the startup and flow transition period.

The Phase 1 work also includes installation of flow meters at the WWTP. One of the primary objectives of this effort was to provide better control of flow between the five oxidation ditches. However, with three of the ditches coming offline, this aspect of the project is less critical. Indeed, it is reasonable to assume that the influent flows will be evenly split between the two online oxidation ditches. Therefore, under this Phase 1 effort, the West Yost team will work with MSWD to develop a revised plan for improved flow monitoring at the WWTP. As shown in Table 1, MSWD will be responsible for installing the recommended flow meters.

Task 1 Deliverables

- West Yost will provide recommendations related to operations and flow meter installation in email format.

Task 2. Soil Nitrogen Removal Monitoring

The objective of this task is to provide support to the MSWD related to the initiation of a soil aquifer treatment evaluation. The main activities of this task include:

- Following the kickoff meeting under Task 5, West Yost will prepare a data request email to obtain the latest data and information related to percolation basin operations.
- West Yost will review the available data and develop recommendations for the soil-aquifer treatment monitoring equipment.
- West Yost will facilitate a meeting with MSWD staff to discuss the recommended monitoring equipment.
- West Yost will install up to three shallow lysimeters for soil-aquifer treatment monitoring with support from MSWD staff.
- West Yost will develop a draft and final sampling plan and protocol for the collection of samples from the monitoring equipment.
- West Yost will facilitate a meeting with MSWD following review of the draft sampling plan.

Task 2 Assumptions

- Two virtual meetings will be conducted with MSWD staff.
- Client will assist West Yost in identifying and compiling the new data and information available.
- All requested data will be provided in electronic (MS Excel) format within two weeks of the submitted request.
- West Yost staff will purchase the required equipment for lysimeter installation and invoice the client.
- MSWD will drain 2-3 ponds identified for monitoring prior to scheduled lysimeter installation.
- The lysimeter installation will occur over two consecutive days. At least one staff member from MSWD will be available to assist West Yost staff in the installation of the soil-aquifer treatment monitoring equipment.
- WWTP Operations Staff will collect monitoring samples following the protocol provided by West Yost
- MSWD will contract with an analytical laboratory for sample analysis.

Task 2 Deliverables

- West Yost will prepare a data request email, detailing the information needs to support this project.
- West Yost will prepare a draft and final sampling plan and protocol in electronic (PDF) format.

Task 3. Background Groundwater Characterization

The objective of this task is to support MSWD with development of a representative upgradient or background groundwater monitoring data set. The main activities of this task include:

- Evaluate potential of using an existing well to serve as a background groundwater monitoring well.
- West Yost will facilitate a meeting with MSWD staff following this evaluation to provide a final recommendation regarding the approach for background groundwater monitoring.
- If an existing well can be utilized, West Yost will develop a report summarizing the justifications for using the existing well for background monitoring. A draft report will be submitted to the Regional Board for approval.
- If no existing well can be utilized, develop an administrative draft, draft, and final monitoring well installation workplan for Regional Board approval.
- West Yost will facilitate a meeting with MSWD following review of the draft report.
- West Yost will coordinate with the Regional Board, as needed, to get approval of the monitoring well justification report or the monitoring well installation workplan, as appropriate.

Task 3 Assumptions

- Two virtual meeting will be conducted with MSWD staff.
- Installation of a new background monitoring well (if needed) will be completed during Phase 2, following Regional Board approval of the Monitoring Well Installation Workplan.
- One virtual meeting with Regional Board staff is anticipated related to review of the draft report that is submitted.

Task 3 Deliverables

- As appropriate, West Yost will provide either an administrative draft, draft, and final Background Monitoring Well Justification report or an administrative draft, draft, and final Monitoring Well Installation Workplan in electronic (PDF) format.

Task 4. As-Needed Support

During this phase of the project, MSWD is expected to require support from West Yost with preparation of three quarterly progress reports (Q1, Q2, and Q3 2024). MSWD may also require support from West Yost related to general coordination with the Regional Board. Finally, some support will also be needed related to developing a plan for the next phases of the study. This task provides for these as-needed support services.

The specific work efforts and deliverables under this task cannot reasonably be determined at this time, so the associated fee estimate presented in this letter proposal is based on a nominal effort. The scope of work under this task will be limited to work that has been requested by the MSWD and can be completed within the available budget. All work will be performed on a time and materials basis, and monthly invoices will detail the efforts and costs. Depending on the level of effort required, a scope and budget amendment may be necessary in the future. If the estimated fee is not expended in the timeframe anticipated for this scope of work, it may also be directed toward the completion of other efforts.

Task 4 Deliverables

- West Yost will coordinate with MSWD if services are requested.

Task 5. Project Management

This task includes project management related activities, including project initiation and kickoff meeting. The efforts under this task include:

- West Yost will prepare for and lead a project kickoff meeting. The agenda for the kickoff meeting will include (i) anticipated objectives of the Implementation Workplan and (ii) schedule to complete the Workplan.
- West Yost will provide general project coordination and develop monthly project invoices.

Task 5 Assumptions

- Client will prepare for and attend the kickoff meeting.
- The duration for the project will be approximately eight months.

Task 5 Deliverables

- West Yost will prepare a draft kickoff meeting agenda in MS Word format prior to the Kickoff Meeting.
- West Yost will provide an email summarizing action items from the Kickoff Meeting within one week of the meeting.
- West Yost will prepare monthly invoices and descriptions of services performed in PDF format.

PROJECT BUDGET

West Yost's proposed level of effort and budget for each of the tasks described above is shown in Table 1. West Yost will perform the Scope of Services described above on a time-and-expenses basis, at the billing rates set forth in West Yost's attached 2024 Billing Rate Schedule, with a not-to-exceed budget of \$84,700. Any additional services not included in this Scope of Services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 1. Estimated Project Hours and Budget		
Task	Level of Effort, hours	Estimated Budget, dollars
Task 1. WWTP Optimization	36	9,100
Task 3. Soil Nitrogen Removal Monitoring	104	26,100
Task 4. Evaluate Background Groundwater Monitoring Well	142	36,000
Task 5. As-Needed Support	34	9,000
Task 6. Project Management	14	4,500
Total Project Hours and Budget	330	84,700

SCHEDULE

The work described in this letter proposal will be complete by September 2024.

Thank you for providing West Yost the opportunity to be of continued service to the MSWD on this important project. Please call with questions or requests for additional information.

Sincerely,
WEST YOST



Kathryn Gies, PE
Engineering Manager



Andy Malone, PG
Principal Geologist II

Attachment: A. West Yost 2024 Billing Rate Schedule



Attachment A

West Yost's 2024 Billing Rate Schedule



2024 Billing Rate Schedule

(Effective January 1, 2024, through December 31, 2024)*

POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$355
Engineer/Scientist/Geologist Manager I / II	\$335 / \$351
Principal Engineer/Scientist/Geologist I / II	\$302 / \$322
Senior Engineer/Scientist/Geologist I / II	\$272 / \$286
Associate Engineer/Scientist/Geologist I / II	\$226 / \$243
Engineer/Scientist/Geologist I / II	\$176 / \$205
Engineering Aide	\$106
Field Monitoring Services	\$131
Administrative I / II / III / IV	\$97 / \$121 / \$145 / \$160
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$349 / \$351
Principal Tech Specialist I / II	\$320 / \$331
Senior Tech Specialist I / II	\$293 / \$306
Senior GIS Analyst	\$265
GIS Analyst	\$251
Technical Specialist I / II / III / IV	\$187 / \$213 / \$239 / \$267
Technical Analyst I / II	\$134 / \$160
Technical Analyst Intern	\$108
Cross-Connection Control Specialist I / II / III / IV	\$140 / \$151 / \$170 / \$189
CAD Manager	\$211
CAD Designer I / II	\$164 / \$185
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$338
Construction Manager I / II / III / IV	\$201 / \$215 / \$228 / \$289
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$181 / \$201 / \$224 / \$232
Apprentice Inspector	\$164
CM Administrative I / II	\$87 / \$118
Field Services	\$232

- Hourly rates include charges for technology and communication, such as general and CAD computer software, telephone calls, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside services, such as vendor reproductions, prints, and shipping; major West Yost reproduction efforts; as well as engineering supplies, etc., will be billed at the actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness services, research, technical review, analysis, preparation, and meetings will be billed at 150% of standard hourly rates. Expert witness testimony and depositions will be billed at 200% of standard hourly rates.
- A finance charge of 1.5% per month (an annual rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

* This schedule is updated annually

2024 Billing Rate Schedule

(Effective January 1, 2024, through December 31, 2024)*

Equipment Charges

EQUIPMENT	BILLING RATES
2" Purge Pump & Control Box	\$300 / day
Aquacalc / Pygmy or AA Flow Meter	\$28 / day
Emergency SCADA System	\$35 / day
Field Vehicles (Groundwater)	\$1.02 / mile
Gas Detector	\$80 / day
Generator	\$60 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Low Flow Pump Back Pack	\$135 / day
Low Flow Pump Controller	\$200 / day
Powers Water Level Meter	\$32 / day
Precision Water Level Meter 300ft	\$30 / day
Precision Water Level Meter 500ft	\$40 / day
Precision Water Level Meter 700ft	\$45 / day
QED Sample Pro Bladder Pump	\$65 / day
Storage Tank	\$20 / day
Sump Pump	\$24 / day
Transducer Communications Cable	\$10 / day
Transducer Components (per installation)	\$23 / day
Trimble GPS – Geo 7x	\$220 / day
Tube Length Counter	\$22 / day
Turbidity Meter	\$30 / day
Turbidity Meter (2100Q Portable)	\$35 / day
Vehicle (Construction Management)	\$10 / hour
Water Flow Probe Meter	\$20 / day
Water Quality Meter	\$50 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day