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RESOLUTION 2025-04
A MARCOLA WATER DISTRICT RESOLUTION AWARDDING A
PROFESSIONAL SERVICES CONTRACT FOR A PFAS FEASIBILITY STUDY
TO CIVIL WEST ENGINEER SERVICES, INC.

WHEREAS, Marcola Water District is a domestic water supply district organized under Oregon Revised Statutes (ORS) Chapter 264, and ORS 263.410 provides that “the power and authority given to districts is vested in and shall be exercised by a board of five commissioners, each of whom shall be an elector of the district”, and the Marcola Water District Board of Commissioners also serves as the Local Contract Review Board, and

WHEREAS, testing has detected low levels of PFAS compounds in both Firehouse and Spicer Wells, and the Marcola Water District desires assistance to study the feasibility of either treating the PFAS or replacing the contaminated wells with wells not contaminated with PFAS, and Business Oregon has awarded \$65,000 in grant funds to conduct such a study, and

WHEREAS, Civil West Engineer Services, Inc. is a qualified professional firm able to perform the necessary feasibility study with support and assistance from GSI Solutions for hydrogeologic analysis, and

WHEREAS, the Oregon Administrative Rules (OAR) provide procedures for selecting consultants for engineering and related services, and OAR 137-048-0200(1)(b) allows direct appointment of a consultant if the estimated fee is less than \$100,000, and Civil West Engineer Services, Inc. has proposed to perform the necessary services for an estimated project fee of \$59,359 and any remaining funds could be used for additional PFAS water testing, and

NOW THEREFORE BE IT RESOLVED, that the Marcola Water District Board of Commissioners and Local Contract Review Board authorizes the Superintendent to execute a contract with Civil West Engineer Services Inc. for professional services related to the PFAS Feasibility Study and authorizes the expenditure of up to \$65,000. Funds are available in the adopted FY 2024-25 Materials & Services budget and will be budgeted again in the FY 2025-26 Materials & Services budget to pay for the project up front, but Business Oregon will reimburse the entire project cost as a grant.

ADOPTED by a vote of ____ Yes votes and ____ No votes, this 14th day of April, 2025.

Attest:

President, Board of Commissioners
and Local Contract Review Board

Secretary, Board of Commissioners
and Local Contract Review Board



South Coast Office
486 E Street
Coos Bay, OR 97420

Willamette Valley Office
200 Ferry Street SW
Albany, OR 97321

Rogue Valley Office
830 O'Hare Parkway, Suite 102
Medford, OR 97504

North Coast Office
609 SW Hurbert Street
Newport, OR 97365

ENGINEERING SCOPE OF SERVICES

Date: March 11, 2025

To: Jamie Porter, Rainbow Water District

From: Matt Wadlington, Civil West Engineering Services, Inc.

RE: **Marcola Water District – PFAS – Feasibility Study**

This document summarizes the services to be provided by Civil West Engineering Services (Civil West) for the Marcola Water District PFAS Feasibility Study.

Project Overview

Marcola Water District (District) owns a potable water system which provides water service to a community of approximately 600 persons in Lane County, Oregon. The District uses eight wells, of which six are active and two have emergency status. The wells are pumped to two reservoirs (100 kgal and 115 kgal) that serve the distribution system. Rainbow Water District provides administrative, operations, and management support to the District.

Testing for perfluoroalkyl and polyfluoroalkyl substances (PFAS) in May 2023 and November 2023 revealed that two actively producing wells had detections of two PFAS compounds. Spicer Well, which steadily produces approximately 50 gpm, was positive for perfluorooctyl sulfonate (PFOS) and perfluorohexanesulfonic acid (PFHxS) at highest concentrations of approximately 6 ppt and 5 ppt respectively. Firehouse well, an active well that provides a base flow of 5-7 gpm for the water system, was positive for PFOS at approximately 5 ppt. The Environmental Protection Agency's maximum contaminant levels for PFOS and PFHxS are 4 ppt and 10 ppt respectively, and waters containing mixtures of certain PFAS contaminants (including PFHxS) must not exceed a Hazard Index of 1.

As a result, the District is in the process of identifying options to mitigate PFAS contamination in the water system. This feasibility study will clearly outline the District's potential options, evaluate the costs and benefits of each alternative, and recommend the most cost-effective alternative to address the issue.

Part A: Scope of Work

The following tasks have been identified to track the project progress. An estimated number of engineering hours has been assigned for the completion of each task. See Exhibit A for a breakdown of hours and costs for each task.

Task 1 – Project Management and Administration

The purpose of this task is to provide the necessary project management and administrative services to conduct an orderly and well-managed project. This will include organizational issues, coordination, financial, and other administrative services. The Civil West project management team will coordinate internal project team members and with representatives from the District.

Task 1 Assumptions:

- The project is expected to take approximately six (6) months to complete.

Task 2 – Evaluation of Existing System

The purpose of this task is to identify, collect, and review available existing information relevant to the project. This task will also initiate project work through a formal kickoff meeting. Civil West will coordinate a virtual project kickoff meeting with the District and other stakeholders identified by the District. During the meeting, the project team will review project goals, schedule, and anticipated deliverables. The team will review the information and identify missing information.

Information gaps identified from this task may inform specific areas of focus for subsequent field investigations or recommendations of additional testing/investigations. This task will include the evaluation of existing easements and property rights of the District to identify and document the locations of wellhead protection easements, and space to accommodate replacement wells and/or treatment facilities.

Task 2 Deliverables:

- Meeting agenda and minutes.
- Map including existing well locations in PDF and GIS formats.

Task 2 Assumptions:

- Marcola Water District and Rainbow Water District will provide a list of stakeholders (if any) to be included in the project kickoff meeting.
- Kickoff Meeting will be held via Microsoft Teams and last approximately 1 hour.
- Source water quality and production data will be provided by the District.
- The District will provide title reports for the properties where wells are located.
- One day of field work will be sufficient to collect GPS locations of existing wells.

Task 3 – Evaluation of New Alternatives

The purpose of this task is to develop treatment alternatives to address the PFAS issue. Civil West will use existing data and information provided by the District to develop the following feasibility study elements:

- Analysis of alternative project feasibility
- Alternatives for projects that address the PFAS issue may include:
 - Connecting to a nearby water system
 - Developing a new water source
 - Increasing usage of non-PFAS contaminated wells
 - Installing PFAS specific water treatment
- Cost estimates for each alternative
- A tentative design and construction schedule

- Analysis including operational costs, maintenance, and long-term infrastructure/material replacements

Task 3 Deliverables:

- Feasibility Study report including the above elements

Subconsultant Costs

The feasibility of obtaining water right authorizations for potential replacement wells, or modification of existing wells, will be evaluated by GSI Water Solutions, Inc. A detailed scope of the work from the subconsultant is provided in Exhibit B. A 10% markup is added to the subconsultant costs to cover administrative costs between Civil West and the subconsultant.

Subconsultant Deliverables:

- Technical Memorandum describing the feasibility of replacement well alternatives

Reimbursables

A budget for anticipated reimbursable costs has been developed for this project. This reimbursables allowance will cover costs associated with mileage, reproductions, shipping, and other reimbursable items related to the project.

Part B: Fee Proposal

This engineering scope of services is limited to the tasks and areas discussed above. It is possible that additional services may be required or requested as part of this project. We can provide other services, as needed and upon request. Additional work, outside the scope presented herein may be performed at the hourly rates presented in Exhibit A. The scope identified above does not include any fees payable to agencies for plan review or permitting. Additional water quality testing is specifically not included in this scope.

Based on the work described in Part A, we propose to provide the work described above for \$59,359. A detailed breakdown of time estimates and rates is provided in Exhibit A.

We are thankful for the opportunity to work with Marcola Water District and look forward to beginning work on this project. If this scope is acceptable to you, please let me know and I will send an engineering contract (standard) to be signed to authorize us to begin work.

Sincerely,
Civil West Engineering Services, Inc.



Matt Wadlington, P.E.
Regional Manager



PFAS Remediation Alternatives, Well Replacement Feasibility Study for the Marcola Water District - Scope of Work and Fee Estimate

To: Matt Wadlington / Civil West Engineering Services, Inc.

From: Matt Kohlbecker, RG / GSI Water Solutions, Inc.
Casey McGuire / GSI Water Solutions, Inc.
Kim Grigsby / GSI Water Solutions, Inc.

Date: April 19, 2024

RE: Scope of Work - PFAS Remediation Alternatives for the Marcola Water District, Oregon

Introduction

GSI Water Solutions, Inc. (GSI) is pleased to provide Civil West Engineering Services, Inc., (Civil West) with this scope of work to develop a well replacement feasibility study that can inform Marcola Water District's (the District) strategy to resolve the impact of per- and polyfluoroalkyl substances (PFAS) on its water supply wells. The Rainbow Water District (Rainbow) manages Marcola's water supply system, which consists of groundwater wells.

Scope of Work

The overall objective of the feasibility study being produced by Civil West and GSI is to help Marcola develop a plan for PFAS remediation by either treatment or source replacement, or a combination of the two. GSI will assess the feasibility of the following two approaches for resolving PFAS contamination in the Marcola groundwater supply: (1) drilling replacement wells from the perspectives of cost and the likelihood of developing a PFAS-free source (Task 1 of this scope of work) and (2) assessing whether water rights can be obtained to authorize the use of one or more new replacement wells (Task 2 of this scope of work). This study will be informed by conversations with Civil West, Marcola, Rainbow, and strategies that other drinking water providers in Oregon and Washington are adopting to address PFAS issues in public water systems. The following provides additional information about these elements of the feasibility study.

Task 1 – Feasibility of Modifying or Drilling Replacement Wells

The objective of this task is to assess the feasibility of drilling replacement wells that meet Marcola's water demand requirements and are not impacted by PFAS. In approaching this task GSI will use its experience in other areas of the southern Willamette Valley that have shown the bedrock aquifers are generally characterized by poor water quality (generally arsenic and elevated total dissolved solids) and lower capacity, although additional literature review will be conducted as a part of this work to confirm these conditions in the vicinity of the Marcola Water District. Activities under this task may include, but are not limited to:

- **Review Existing Documents.** Review of available literature, including but not limited to the Water System Master Plan (1995), Water System Feasibility Study (2018), and the Water Master Plan (2021).
- **Develop a Conceptual Hydrogeologic Model.** Plot existing well locations on a surficial geologic map, develop a geologic cross section, and identify the aquifers in which the wells are completed. Develop a conceptual hydrogeologic model for the area near Marcola, including a summary of geologic units, aquifers, potential water quality issues, aquifer yields, groundwater flow directions, aquifer conditions (confined or unconfined), and sources of recharge.
- **Evaluate Potential PFAS Sources.** Review the Oregon Department of Environmental Quality's Environmental Cleanup Site Information database to identify obvious PFAS sources and evaluate whether PFAS concentrations in groundwater represent a diffuse or point source.
- **Replacement Well Feasibility Study.** Study the feasibility of drilling replacement wells for sites with known PFAS water quality issues. The feasibility study would involve an identification of areas of the District where groundwater is not likely to be impacted by PFAS (e.g., potentially upgradient), followed by an evaluation of land available for a replacement well, whether existing distribution piping is located nearby to convey water from the well to Marcola's service area, pressure zone considerations, consideration of water right authorization opportunity and impediments (as described in Task 2), and an approach and planning-level costs for replacement wells. The feasibility study will also discuss the risk of encountering other adverse water quality issues, like elevated arsenic at the Shields Well and Roberts Well.

Task 2 – Water Rights Feasibility Analysis for Replacement of the District's Water Supply Wells

The objective of this task is to assess the feasibility of obtaining water right authorizations for potential replacement well locations identified in Task 1. Activities under this task may include, but are not limited to:

- Obtain and review information regarding the District's wells, water use, and water right.
- Assess opportunities under the Oregon Water Resources Department's (OWRD) regulatory (transfer) process to change the authorized point of appropriation for Marcola's Certificate 30884 (formerly Permit G-627) to another well(s) including:
 - Reviewing hydrogeology to confirm wells would appropriate water from the same source;
 - Considering other wells in the area to assess the potential for injury to other groundwater rights;
 - Evaluating potential increased impacts to surface water sources and water rights.
 - Reviewing construction of existing wells, as appropriate.
- Assess the opportunities under the OWRD regulatory (permit) process to obtain additional water rights for the replacement well(s) or other suitable wells (not contaminated, properly constructed, OHA compliant, etc.) within Marcola's water supply system.

Task 3 – Reporting

GSI will summarize the feasibility assessment in a technical memorandum (TM). The TM will outline recommendations and opinions of probable cost for replacing existing or drilling new wells. GSI will also highlight the opportunities and challenges regarding water rights and estimated costs for pursuing water rights transactions. GSI will submit a draft TM to Civil West, Rainbow, and Marcola (the team) for review. GSI will meet with the team to discuss comments and finalize the TM based on comments received.

Assumptions

1. The TM can be finalized with a single review cycle.
2. Marcola will provide information to GSI on existing conveyance piping locations and pressure zone considerations.
3. No site visits or other in-person activities will be conducted as part of this work.

Deliverables

- 1. Monthly invoices with summaries of monthly activities completion
- 2. Draft Technical Memorandum to Civil West for Review and Comment
- 3. Final Technical Memorandum

Fee Estimate

We propose to perform this scope of work on a time and materials basis for an amount not to exceed **\$29,210**. This budget is summarized in Table 1 below. The fee per task may vary but GSI will not exceed the total budget without prior approval.

Table 1 Fee Estimate

Tasks	Labor Hours	Labor Cost	Total
Task 1 – Feasibility of Modifying or Drilling Replacement Wells	64	\$9,860	\$9,860
Task 2 – Feasibility of Locating One or More New Replacement Wells	50	\$9,070	\$9,070
Task 3 – Reporting	63	\$10,280	\$10,280
Project Totals	174	\$29,210	\$29,210

GSI's 2024 labor rates are attached with an annual rate increase occurring at the beginning of each calendar year (the total authorized budget will not increase when rates increase). This scope of work and budget estimates are based on our current project understanding. GSI will work closely with Civil West and Marcola to adjust and refine the scope and budget, if necessary, based on the project needs. As we proceed with the work, we will keep you informed of our work progress and the status of our budget.

Schedule

We estimate that the work described in this proposal can be completed in approximately four months. Therefore, assuming the contract is awarded by June 10, 2024 and GSI can begin work on July 1, 2024, GSI can provide Civil West with a DRAFT PFAS Remediation Alternatives Feasibility Study by October 1, 2024. Following client review, GSI can provide the final study within 2 weeks.

GSI would like to thank you for this opportunity to provide consulting services to the Civil West on this Marcola project.

Sincerely,

GSI Water Solutions, Inc.



Matt Kohlbecker, RG
Principal Hydrogeologist



Kim Grigsby
Principal Water Resources Consultant

Enclosure – GSI's 2024 Labor Rates

RESOLUTION 2025-05

**MARCOLA WATER DISTRICT
RESOLUTION AUTHORIZING THE RENEWAL AND RENAMING
OF THE REPLACEMENT RESERVE FUND**

WHEREAS, Marcola Water District (District) is a domestic water supply district organized under Oregon Revised Statutes (ORS) Chapter 264, and ORS 263.410 provides that “the power and authority given to districts is vested in and shall be exercised by a board of five commissioners, each of whom shall be an elector of the district”, and the Marcola Water District Board of Commissioners also serves as the Local Contract Review Board, and

WHEREAS, the District Board of Commissioners, in adopting the budget for the fiscal year 2013-14 and making the appropriations to fund the budget, did authorize the establishment of a Replacement Reserve Fund and approve transferring funds from the General Water Fund to the Replacement Reserve Fund with a state purpose to provide for the replacement of aging and deteriorated buildings and utility infrastructure, and

WHEREAS, in accordance with ORS 294.346 the need for and purpose of any reserve fund will be reviewed at least every ten years to determine if the reserve fund should continue or be abolished, and the District Board of Commissioners finds a need still exists and hereby renames the Replacement Reserve Fund as the **Capital Reserve Fund** with the expanded purpose to provide for the replacement of aging or deteriorated buildings and utility infrastructure that enables the district to operate source, storage, treatment and related functions necessary for the provision of water for domestic and fire protection uses, and

WHEREAS, money transferred into the Capital Reserve Fund will be budgeted as a reserve fund and physically stored in an interest-bearing account with the Local Government Investment Pool or other investment account as authorized by the District Board of Commissioners, and

NOW THEREFORE, be it resolved, the Board of Commissioners authorizes the renewal of the Replacement Reserve Fund, now called the Capital Reserve Fund, with transfers to or from this account to be determined during the annual budget process or by separate Board action.

ADOPTED this 14th day of April 2025 by a vote of _____ Yes and _____ No.

Attest:

President
Board of Commissioners and
Local Contract Review Board

Secretary
Board of Commissioners and
Local Contract Review Board