

Contract Amendment No. 4
Hartstene Pointe Water-Sewer District
Water Treatment Plant Improvements
Well No. 2 Structure Modifications and Additional Electrical and Automatic Control Design

RH2 Project No. HP 112-007

In accordance with our Professional Services Agreement for the Water Treatment Plant Improvements project, dated January 12, 2012, this is an authorization to revise the project Scope of Work as described below. The work will be performed and invoiced using the terms and conditions listed in the original Agreement, plus previous amendments and/or agreements.

Add the following items to the Scope of Work:

Reference attached **Exhibit A** and **Exhibit B**, per the rates listed in **Exhibit C**.

The engineering fee authorization will increase by \$22,933 for a total authorization amount of **\$178,276**.

Please sign this authorization in the space provided below and mail or fax to RH2 Engineering, Inc., 22722 29th Drive SE, Suite 210, Bothell, WA 98021. FAX (425) 951-5401.


RH2 Engineering, Inc.

Hartstene Pointe Water-Sewer District



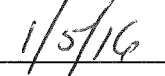
Signature

Signature



Print Name/Title

Print Name/Title



Date

Date

Exhibit A
Scope of Work
Amendment No. 4
Hartstene Pointe Water-Sewer District
Water Treatment Plant Improvements
Well No. 2 Structure Modifications and Additional Electrical and Automatic
Control Design
January 2016

Background

The Washington State Department of Health (DOH) has approved the construction documents for the Water Treatment Plant Improvements project. Prior to bidding the project for construction, Hartstene Pointe Water-Sewer District (District) has requested RH2 Engineering, Inc., (RH2) to perform design work to include additional improvements for this project. The additional improvements do not require DOH review and approval.

The design work includes modifying the Well No. 2 proposed chemical building to include an additional room for pool equipment storage, and to redesign the roof structure to meet Hartstene Pointe Maintenance Association (HPMA) requirements. It also includes revisions to the electrical and automatic control design to address changes from the original supervisory and data acquisition (SCADA) improvements scoped with the District; to relocate Well No. 2 electrical equipment into the existing filter building; and to include miscellaneous electrical improvements at the District's reservoir site. Work to perform design review of the revised design documents (plans and specifications) and to finalize the design documents to 100-percent completion (bid-ready) is also included.

Previous tasks for this project were included in the original contract and subsequent amendments. Task 1 – Project Report was included in the original contract. Task 2 – Final Design, Task 3 – Permitting Assistance, and Task 4 – Services During Bidding were included in Amendment No. 1. Task 5 – DWSRF Project Requirements, and Task 6 – Additional Piping and Instrumentation Design were included in Amendment No. 2. Task 7 – Chemical Feed Systems Replacement Design was included in Amendment No. 3.

The design work to include the additional improvements in this project are included in this Scope of Work under the following tasks.

- **Task 8 – Well No. 2 Structure Modifications**
- **Task 9 – Additional Electrical and Automatic Control Design**

Future Tasks

A future Scope of Work and Fee Estimate may be developed to address services during construction to be provided by RH2 for this project.

- **Task 10 – Services During Construction**

Project Approach

Task 8 – Well No. 2 Structure Modifications

Objective: Modify the currently proposed Well No. 2 structure to include a second room for HPMA pool material and equipment storage and to tie the proposed roof into the existing treatment plant building roof. Update the design documents and engineer’s estimate with the modifications.

Approach:

8.1 Prepare Well No. 2 Structure Modifications – Review the existing treatment plant building roof design information provided by the District. Create up to two (2) additional structural plan drawings and update the current Well No. 2 structural, mechanical, and electrical plan drawings. Include rerouting of existing paved pathway, along with extension of the pathway to the existing treatment plant building double door. Update applicable technical specifications and the engineer’s estimate to include the proposed structure and walkway modifications.

Assumptions:

- *Building space to be added will be approximately 10 feet, 4 inches by 9 feet, 0 inches (internal dimensions) and located on the east side of the current proposed building structure. A double man-door and louvers for passive ventilation will be included for the pool storage room. The pool storage room will not include lighting, heating, or any type of plumbing.*
- *Part of the existing paved pathway adjacent to the proposed improvements will be removed and replaced to allow for the extents of the pool storage room to be constructed.*
- *RH2’s proposed structure modification design work will not include any type of code compliance evaluation related to what materials and equipment the HPMA will be storing.*
- *Building permits will not be submitted to Mason County during the design phase. The awarded contractor will submit necessary building permits to Mason County and coordinate with the District regarding any permit provisions that conflict with the contract documents.*

Provided by the District:

- See Task 9.

RH2 Deliverables:

- See Task 9.

Task 9 – Additional Electrical and Automatic Control Design

Objective: Update the current design documents and engineer’s estimate to include additional electrical and automatic control improvements. Provide design review of revised design documents. Submit 95-percent design documents to the District for final review. Prepare bid-ready documents.

Approach:

9.1 Update SCADA Improvements – Prepare SCADA improvement updates to the plans and specifications (design documents) to include the addition of a DSL telephone line connection at

**Hartstene Pointe Water-Sewer District
WTP Improvements – Well No. 2 Structure Modifications and
Additional Electrical and Automatic Control Design**

**Exhibit A
Scope of Work
Amendment No. 4**

- Well No. 1 and connecting Well No. 2 to the new TCP/IP Ethernet network at Well No. 1. Coordinate the installation of a DSL telephone line with CenturyLink.
- 9.2 Relocate Well No. 2 Building Electrical Equipment – Update the Well No. 2 one-line diagram, electrical plan, and electrical schedules to show the relocation of the existing and proposed electrical equipment at the existing well building to the treatment building. Coordinate the electrical service relocation with the electrical power provider, Public Utility District No. 3 of Mason County.
- 9.3 Prepare Electrical Improvements at Reservoir Site – Update the functional descriptions in the technical specifications to incorporate the operation of the booster pump station and reservoir with the wells. Update the reservoir site electrical plan and details to show the removal of unused electrical equipment and conduit at the reservoir and to reconnect power to the reservoir cathodic protection system from the booster pump station electrical service. Identify a power connection and install conduits for a future PAX mixer system at the reservoir. Update the project phasing plan in the specifications and the general construction schedule.
- 9.4 Perform Quality Assurance/Quality Control, District Review, and Prepare Bid-ready Documents – Perform an in-house quality assurance/quality control (QA/QC) review of the revised design documents by RH2 senior designers and update documents. Submit 95-percent design documents and engineer’s estimate to the District for final review. Prepare bid-ready design documents based on District comments.

Provided by the District:

- One (1) set of 95-percent design documents with District red-lined markups.

RH2 Deliverables:

- Two (2) hard copy sets and one (1) PDF of specifications and half-size plans for 95-percent review by the District.
- Engineer’s estimate for 95-percent review by District.

EXHIBIT B

Harstene Pointe Water-Sewer District

Water Treatment Plant Improvements

Amendment No. 4 - Well No. 2 Structure Modifications and Additional Electrical and Automatic Control Design

Estimate of Time and Expense

Description		Total Hours	Total Labor	Total Expense	Total Cost
Task 8	Well No. 2 Structure Modifications	29	\$ 4,888	\$ 537	\$ 5,425
8.1	Prepare Well No. 2 Structure Modifications	29	\$ 4,888	\$ 537	\$ 5,425
Task 9	Additional Electrical and Automatic Control Design	93	\$ 15,558	\$ 1,950	\$ 17,508
9.1	Update SCADA Improvements	20	\$ 3,274	\$ 461	\$ 3,735
9.2	Relocate Well No. 2 Building Electrical Equipment	19	\$ 3,104	\$ 428	\$ 3,532
9.3	Prepare Electrical Improvements at Reservoir Site	14	\$ 2,296	\$ 316	\$ 2,612
9.4	Perform QA/QC, District Review, and Prepare Bid-ready Documents	40	\$ 6,884	\$ 745	\$ 7,629
PROJECT TOTAL		122	\$ 20,446	\$ 2,487	\$ 22,933

EXHIBIT C RH2 ENGINEERING, INC. 2016 SCHEDULE OF RATES AND CHARGES		
RATE LIST	RATE	UNIT
Professional I	\$137	\$/hr
Professional II	\$150	\$/hr
Professional III	\$159	\$/hr
Professional IV	\$170	\$/hr
Professional V	\$180	\$/hr
Professional VI	\$189	\$/hr
Professional VII	\$204	\$/hr
Professional VIII	\$213	\$/hr
Professional IX	\$213	\$/hr
Technician I	\$96	\$/hr
Technician II	\$101	\$/hr
Technician III	\$129	\$/hr
Technician IV	\$137	\$/hr
Administrative I	\$65	\$/hr
Administrative II	\$77	\$/hr
Administrative III	\$92	\$/hr
Administrative IV	\$108	\$/hr
Administrative V	\$128	\$/hr
CAD/GIS System	\$27.50	\$/hr
CAD Plots Half Size	\$2.50	price per plot
CAD Plots Full Size	\$10.00	price per plot
CAD Plots Large	\$25.00	price per plot
Copies (bw) 8.5" X 11"	\$0.09	price per copy
Copies (bw) 8.5" X 14"	\$0.14	price per copy
Copies (bw) 11" X 17"	\$0.20	price per copy
Copies (color) 8.5" X 11"	\$0.90	price per copy
Copies (color) 8.5" X 14"	\$1.20	price per copy
Copies (color) 11 X 17"	\$2.00	price per copy
Technology Charge	2.50%	% of Direct Labor
Mileage	\$0.540	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	