

**FIRST AMENDMENT
TO PROFESSIONAL SERVICES AGREEMENT
WITH GHD, INC., FOR THE WASTEWATER TREATMENT AND RECLAMATION PLANT
IMPROVEMENTS FEASIBILITY STUDY AS PART OF CAPITAL IMPROVEMENT PROJECT S-52**

This First Amendment to Agreement for Professional services is made effective on June 13, 2017 by and between the City of St. Helena, a municipal corporation ("City"), and GHD, Inc., ("Consultant").

RECITALS

- A. Pursuant to the terms of the written Agreement between City and Consultant, dated May 9, 2016, and approved by Resolution No. 2016-63, dated May 24, 2016, the City entered into a Professional Services Agreement with Consultant for \$292,108 ("Agreement") regarding the City's Wastewater Treatment and Reclamation Plant Improvement Feasibility Study ("Project"). The Project is part of the City's Capital Improvement Project S-52; and
- B. Additional work has been identified and required by the California Regional Water Quality Control Board ("RWQCB"); and
- C. The Agreement's current Scope-of-Services does not include the funds or additional work that has been identified by the RWQCB; and
- D. City and Consultant now desire to amend the Agreement to include, as Part of Capital Improvement Project S-52, the Pre-Design and Percolation Testing of Irrigation Fields required by the RWQCB; and
- E. The Consultant has represented it has the necessary expertise, experience, and qualifications to perform the additional services for the Project; and

TERMS

- A. In consideration of the promises and of the mutual covenants and agreements herein contained, for good and valuable consideration, the adequacy of which is hereby acknowledged, the parties agree to amend the Agreement as follows:

- a. Section 1. Basic Services

Exhibit A – Scope of Services to the Agreement is to remain in effect and the work identified in Exhibit C – Additional Scope of Services will be added as part of the Agreement.

Agreement. Section 1, Basic Services, is amended to read as follows:

"Consultant agrees to perform the services and work (together, "services") set forth in Exhibit A, Scope of Services, and Exhibit C, Additional Scope of Services and made part of this Agreement."

b. Section 4. Compensation and Method of Payment

In review of the Agreement approved by Resolution No. 2016-63, a mathematical error was discovered. The original Agreement total should have been \$287,364.00, and not \$292,108.00, as stated in Exhibit B. This error has been correct and is reflected in Exhibit D.

Exhibit B (Compensation) is hereby nullified and replaced with Exhibit D. Agreement, Section 4.A, is amended to reflect the correct compensation amount to \$287,364, plus an increase of \$76,130 to the total compensation payable to Consultant under the Agreement.

Agreement, Section 4.A., is amended to read as follows:

"Subject to any limitations set forth in this Agreement, City agrees to pay Consultant the amount specified in Exhibit D, "Compensation" attached hereto and made a part hereof. Total compensation shall not exceed \$363,494.00, unless prior additional compensation is approved in writing in accordance with Section 2."

- B. The Agreement, as modified by this First Amendment, constitutes the entire agreement between City and Consultant. Except as expressly set forth in this First Amendment, the Agreement has not been modified, changed, altered, or amended, and is in full force and effect.

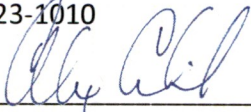
Entered as of the day and year first above stated.

IN WITNESS WHEREOF, the parties hereto have accepted, made, and executed this Agreement upon the terms, conditions, and provisions above stated, the day and year first above written.

(Signatures on next page.)

CONSULTANT:

Alex Culick, Principal
GHD, Inc.
2235 Mercury Way, Ste 150
Santa Rosa, CA 95404
707-523-1010



Signatures of Authorized Persons:

By: _____

Print Name: Alex Culick, PE

Title: Principal

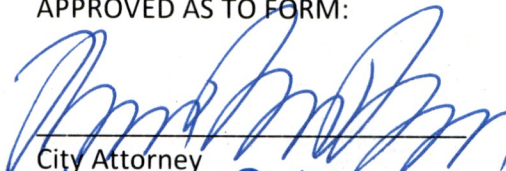
CITY OF ST. HELENA
a Municipal Corporation

By:  _____

Print Name: Larry F. Pennell

Title: Interim City Manager

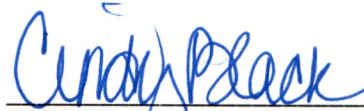
APPROVED AS TO FORM:



City Attorney

Thomas B. Brown

ATTEST:



City Clerk

Cindy Black

Attachments:

- Exhibit A – “Scope of Services”
- Exhibit C – “Additional Scope of Services”
- Exhibit D – “Updated Compensation”

Exhibit C – Additional Scope of Services

City of St. Helena Wastewater Treatment and Reclamation Facility Pre-Design and Percolation Testing of Irrigation Fields

Task 7 - Project Management

GHD will provide Project Management of the project that will include project set up and overall coordination of the project throughout the development of the pre-design and field work. QA/QC for project deliverables is included under specific scope tasks.

Task 8 -2 Pre-Design

Based on requirements by the Regional Water Quality Control Board (the RWQCB and required information to support the groundwater investigation and Report of Waste Discharge (ROWD), GHD will initiate and complete pre-design work to develop additional and refined data that was beyond the scope of the Feasibility Study. Tasks will include:

1. Develop estimates of Biological Oxygen Demand (BOD), Total Suspended Solids (TSS) reduction with the Pond Enhancement Treatment and Operation (PETRO) process and trickling filter proposed in the feasibility study and based on recent wastewater data collected in May 2017.
2. Use new data from May 2017 sampling to refine treatment approach for reduction of ammonia per permit requirements. This will include initial pre-design work related to the recycle requirements for the PETRO process. This information is needed for an estimate of the effluent quality that will be discharged to the fields for subsurface disposal during winter disposal operations.
3. Develop alternatives to control nitrogen as required per the discharge requirements for the Basin Plan for Total Kjeldahl Nitrogen (TKN), ammonia and nitrates. As discussed with the RWQCB on April 21, 2017 there will not be numerical limits beyond those delineated in the permit for ammonia but it will be required to show that the proposed discharge won't violate basin plan requirements when discharging to the river and to the groundwater during the winter disposal operations. The Groundwater Fate and Transport Modeling work being completed by Larry Walker Associates in support of the ROWD will provide the supporting information to support basin plan requirements. GHD will coordinate with Larry Walker and Associates and review the basin plan targets and requirements and provide nutrient discharge estimates.
4. Develop a schematic of the PETRO process and trickling filter to show proposed recycle routes and provide estimates of effluent quality based on the recently acquired pond data from May 2017.

Deliverables:

- Preliminary Design Report

Task 9 -3 Infiltration Study

Determining the infiltration rate is planned for two phases. In the first phase, percolation testing and grain size analysis will be performed across the entire project site. Once the specific infiltration area is determined, double ring infiltrometer testing will be performed across that area at the appropriate elevation. This scope of work includes scope and costs for the first phase of testing and initial infiltration determination. Final infiltrometer testing will be included in a separate scope of work. Professional geotechnical services to be provided under this scope of work include the initial infiltration determination.

The objective of the infiltration evaluation is to investigate, evaluate, and understand the soil, groundwater, and infiltration properties of the site to provide an estimate of initial infiltration for planning purposes. The geotechnical investigation will be performed in the responsible charge of a licensed Geotechnical Engineer. Services include the following:

1. GHD will review available published geotechnical and geologic data applicable to the project.
2. Exploration will include up to 10 hand-auger borings across the site to depths of about 5 feet. Grab samples will be obtained in different strata and the soil shall be field-classified in general accordance with ASTM D2488.

In up to five of the 10 borings, percolation tests will be performed at depths between 2 and 5 feet in general accordance with the County of Napa percolation guidelines. Due to the need to soak the holes before performing the percolation test, percolation testing may take up to two days after the completion of drilling.

3. GHD will perform laboratory tests to provide information in confirming the grain size and permeability of the upper 5 feet of soil. The laboratory testing will primarily include sieve analyses.
4. Engineering analysis, including reduction of the percolation test data and laboratory test results to determine permeability and infiltration characteristics of the upper 5 feet of soil.
5. A preliminary infiltration report summarizing the results of the exploration, field and laboratory testing, and engineering analysis will be prepared and will include the following:
 - a. Description of physical properties and characteristics of the levee embankment material, native soil, and groundwater
 - b. A plan showing the locations of borings and log of borings
 - c. Discussion of general and local site geology
 - d. A summary of the percolation test data
 - e. A summary of all laboratory test data
 - f. A summary of the analysis results and conclusions for potential mitigation and monitoring, as appropriate
6. Deliverable: One digital copy of the preliminary infiltration report.

Exhibit D – Updated Compensation
City of St. Helena Wastewater Treatment and Reclamation Facility
Pre Design and Percolation Testing of Irrigation Fields

Fee

All work will be performed on a time and materials basis. GHD can provide the above described scope of services for an estimated fee of:

Original Scope of Work

Task	Total
Task 1 - Project Initiation	\$19,018.00
Task 2 - Investigation & Research	\$30,646.00
Task 3 - Draft Feasibility Study	\$87,720.00
Task 4 - Final Feasibility Study	\$22,154.00
Task 5 - Draft Facility Work Plan	\$103,304.00
Task 6 - Final Facility Work Plan	\$24,522.00
<i>Subtotal</i>	<i>\$287,364.00</i>

Additional Amended Scope of Work

Task 7 - Project Management	\$8,414
Task 8 – Pre-Design	\$57,916
Task 9 - Infiltration Study	\$9,800.00
<i>Subtotal</i>	<i>\$76,130.00</i>

Total Compensation \$363,494.00

Assumptions and Clarifications

- The City will provide access to the site; an encroachment permit is not necessary
- Work hours will be weekdays between 8 am and 5 pm
- Wet weather may delay the schedule of field services
- Additional work and meetings not referenced will be provided under a separate scope and fee
- Detailed design and development of a bid package for design of the WWTRP modifications will be developed under a separate scope and fee
- Comments will be provided in one set of consolidated comments from all reviewers