

Contract Amendment No. 1
Construction and Engineering Geology Support for Hatt Slough Springs Access Road Repair

RH2 Project No. STA 413.016

In accordance with our Professional Services Agreement for the Hatt Slough Springs Geologic and Geotechnical Evaluation dated January 25, 2013, 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.

Please see the attached **Exhibit A** and **Exhibit B**.

The engineering fee authorization will increase by \$4,407 for a total authorization amount of **\$25,024**.

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.

City of Stanwood

Signature

Tony V. Pardi

Signature

Print Name

Tony V. Pardi

Print Name

Title

Vice President

Title

Date

5/24/13

Date

Exhibit A
Scope of Work
Amendment No. 1
City of Stanwood
Construction and Engineering Geology Support for
Hatt Slough Springs Access Road Repair
May 2013

Background

The City of Stanwood's (City) Hatt Slough Springs source of supply facility is located south of the City limits and Hatt Slough, near the base of a steep slope. The springs are situated on City-owned property in an undeveloped area that is accessed by a dirt road from Marine Drive. Four spring collection areas are located within the fenced and secured property. Each collection area has an infiltration piping gallery that delivers water to a 300-gallon settling tank. Water is conveyed by gravity through pipes from each of the settling tanks to the pump building, which houses the mechanical, chlorination, and electrical equipment. The Hatt Slough Springs source was constructed in 1934 and was granted a maximum instantaneous water right of 1,125 gallons per minute (gpm) in 1939 under water right S1-02432CWRIS. However, the current maximum supply rate of the springs is approximately 250 gpm.

Since the existing collection system does not have the capacity to fully utilize the water right for the spring source, the City's 2010 *Comprehensive Water System Plan* (WSP) recommended Capital Improvement Project (CIP) F10 for conducting a Hatt Slough Springs Study. The project is described as follows:

Conduct an evaluation of the Hatt Slough Springs to determine the sources' ability to produce water supply at a rate equivalent to the water right amount. Identify improvements for increasing the capacity of the source. Recommend a sampling schedule and procedures for the City to implement to determine the potential for surface water influence on the spring. Also, evaluate the stability of the steep slope adjacent to the facility and recommend measures to resolve concerns regarding the slope's stability.

CIP F11 is the proposed Hatt Slough Rehabilitation project, which would replace the aging facility with a facility that fully utilizes the existing water right.

Since the time of the WSP, the access road to the Hatt Slough Springs facility has become a significant problem as it is now impassable. Access to this site was evaluated to determine the ability to continue using this source in the future. Initial geologic and geotechnical analyses prepared by RH2 Engineering, Inc., (RH2) evaluated the feasibility of the City's continued operation of the Hatt Slough Springs Source and concluded that an interim solution to repair the road and improve drainage was warranted to improve access to the springs. The City intends to contract road repair, which will include removal of soil on the access road, re-grading the road, and installing drainage system to collect and convey seepage away from the road. This Scope of Work summarizes professional services to support the proposed repair of the access road and installation of drainage to decrease the effect of groundwater seepage on road stability.

Task 1 – Support for Road Repair

Objective: Provide services during construction and engineering geology support of the access road repair.

Approach:

- 1.1 Prepare a schematic road section detail for inclusion with the City construction contract.
- 1.2 Meet with the City and contractor to provide initial direction for road repair.
- 1.3 Provide on-call support to respond to contractor and City staff questions during road repair activities. Provide on-call inspection of road repair activities.

RH2 Deliverables:

- Schematic road section detail.
- Assistance in the field with initial direction for the contractor.
- On-call technical assistance during construction.

Provided by the City:

- Preparation and management of the construction contract and contractor for the road repair. To better assist the City with on-call services during construction, RH2 recommends the City provide RH2 with the inspection field reports, photographs, and as-built drawings.

Schedule

The City intends to complete the project during summer 2013 when soil moisture at the access road is low.

EXHIBIT B

City of Stanwood

Support for Hatt Slough Springs Access Road Repair

Amendment No. 1

Estimate of Time and Expense

	Description	Total Hours	Total Labor	Total Expense	Total Cost
	Classification				

Task 1	Support for Road Repair				
1.1	Schematic Road Section Detail	3	\$ 473	\$ 67	\$ 540
1.2	Initial On-site Meeting and Contractor Direction	4	\$ 708	\$ 170	\$ 878
1.3	On-call Services	17	\$ 2,916	\$ 73	\$ 2,989
	Subtotal	24	\$ 4,097	\$ 310	\$ 4,407

PROJECT TOTAL	24	\$ 4,097	\$ 310	\$ 4,407
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