

February 24, 2017

Ms. Kathleen Ramsey, Town Manager  
Town of Middlebury  
94 Main Street  
Middlebury, VT 05753

Re: Amendment No. 1  
EPA Order On Consent  
Overflow Control Plan  
A+E Project #16051

Dear Kathleen:

In accordance with the written Agreement dated September 14, 2016, for professional engineering consultant services, Aldrich + Elliott, PC (ENGINEER) is authorized to proceed with the services outlined below. All provisions, of the original Agreement and prior Amendments are made part of this Amendment and visa versa.

**SCOPE OF SERVICES**

Professional engineering consultant services are to be performed by the ENGINEER as detailed in Attachment No. 1 of this Amendment.

**BASIS OF COMPENSATION**

For services performed under this Amendment, the OWNER agrees to compensate the ENGINEER as follows:

- an Hourly Fee based on actual expenses incurred in the performance of this Amendment, to include a labor expense equal to the actual salaries of personnel, overhead expense of 1.70 times the labor expense, profit equal to 16% of labor and overhead expenses, plus subconsultant and other expenses listed in Attachment No. 2 of the original Agreement. The Fee for these services shall not exceed THIRTY-ONE THOUSAND DOLLARS (\$31,000.00).

It is understood that the ENGINEER's labor rates are adjusted annually, on or about the first day of each calendar year and that the services provided under this Amendment shall use the current rates at the time that the work is performed.



**TERMS AND CONDITIONS**

The Terms and Conditions of the original Agreement shall govern this Amendment.

**EXECUTED AGREEMENT**

This Amendment shall be considered binding when duly authorized agents of the ENGINEER and the OWNER sign the document and one (1) executed copy is returned to the office of the ENGINEER. If this Amendment is not executed within sixty (60) days of the date on the Amendment, it may be subject to re-negotiation or withdrawal by the ENGINEER.

**OFFER OF PROFESSIONAL ENGINEERING SERVICES**

The ENGINEER, as an independent agent, offers to provide the professional engineering services described in this Amendment, for the compensation specified.

*Aldrich + Elliott, PC*

Wayne A. Elliott, PE  
Vice President

**OWNER ACCEPTANCE**

The OWNER acknowledges this to be a binding Amendment to the original Agreement and any prior Amendments and agrees to the conditions as stated. The ENGINEER is hereby directed to proceed with the scope of services.

The OWNER acknowledges that is has the financial resources and intends to pay for services rendered in accordance with the conditions as stated herein and acknowledges that if invoices are not paid in full within sixty (60) days of date of invoice, that the ENGINEER may stop work, without consequence or liability of any kind, until the invoices are paid, as set forth in the Terms and Conditions.

The OWNER warrants that the signature below is that of its duly authorized agent who possesses the full legal authority to execute this Amendment on behalf of the OWNER.

The OWNER acknowledges that this Amendment is comprised of, and incorporates by reference, Attachment No. 1.

**Town of Middlebury**

\_\_\_\_\_  
Duly Authorized Agent

\_\_\_\_\_  
Date of Execution

\_\_\_\_\_  
Witness to Signature

Executed in Duplicate  
Project #16051

## ATTACHMENT NO. 1

### SCOPE OF SERVICES

#### INTRODUCTION

This amendment is a continuation of the work started in 2016 to address the requirements outlined in the Administrative Order on Consent from EPA dated April 25, 2016. As required by the Town, a wet weather overflow evaluation submitted to EPA by December 31, 2016. This document is still under review by EPA. In this wet weather overflow evaluation, the following locations were recommended for inclusion into the Plan:

- Weybridge Pump Station (#3)
- Weybridge Pump Station (#9)

An overflow control plan is due to EPA by December 31, 2017 for review and approval but it should be noted that if there is a weather delay in completing the wet-weather overflow evaluation, the Town may submit to EPA a request for an extension.

#### SCOPE OF SERVICES

The ENGINEER will provide the following professional engineering consultant services under the scope of this Amendment:

##### **Sewer System Investigation**

Sewer system investigation will be performed within the service areas of each location to better define and verify sources and volumes of wet weather flows, and this work will include the following:

- Flow metering
- Smoke testing

Flow metering will be performed upstream of these pump stations to gather additional information on peak flows as impacted by wet weather events. The plan is to have these units installed in mid March so that monitoring of actual flows can begin and continue into the fall. A site visit will be performed with Town staff to identify suitable monitoring locations and an additional site visit will be performed to assist with the installation and calibration of the flow meters. Training will be provided to Town staff regarding checking of the flow meters and download of the data. Up to two (2) additional site visits are included to assist with checking and or recalibration of the flow meters.

Smoke testing in areas suspected of sources of inflow will be performed. This effort may include checking of building roofs and/or catch basin structures. It is assumed that assistance with the dye testing will be provided by Vermont Rural Water Association staff. A+E will assist with coordination of the smoke testing for specific areas to include the data analysis.

Field investigations will be performed with Town staff to visit areas of concern relative to sources of inflow; building roofs, catch basins, etc. After the field work, assessment will be performed of these contributing areas to estimate the flow contributions and impacts to better characterize the overflows.

## **Sump Pump Mapping Updates**

The Town will provide additional information and addresses to update the mapping identifying the locations of known sump pumps. This information will be further sorted to identify these sources of wet weather flow in the service area of pump stations #3 and #9.

## **Overflow Characterization Updates**

Any overflows that occur in 2017 at these locations for pump stations #3 and #9 will be documented and characterized in the plan.

## **Analyze Sources of Additional Flow**

The rainfall and flow metering information gathered under the field investigations will be used to further analyze the additional sources of flow. This may include infiltration, flow from sump pumps, inflow, etc. For each of these locations, the flow information will be updated for the dry and wet weather flows.

## **Alternatives Evaluation**

For each of these locations, the alternatives evaluated for control of the overflows shall consider the following applicable measures as required by EPA:

- Upgrading pumps
- Increasing capacity in sewerlines
- Removing sump pumps and sources of inflow
- Removing connected impervious cover
- Increasing storage and repairing/rehabilitating sewerlines to decrease

These measures will be ranked and prioritized for each service area, and a technical assessment will be performed for the applicable measures. For those measures that are determined to be effective, estimates of wet weather flow reduction will be developed.

## **Proposed Project**

For each of the active overflow locations at pump stations #3 and #9, the following information will be developed:

- A detailed list of actions to be taken, and estimates of amount of wet-weather inflow removed;
- Calculations for each overflow point demonstrating that there will be limited overflows in wet weather after the plan is fully implemented
- A timeline for completing the work
- A budget for completing the work
- A description of methods for ensuring that other parties who own or operate portions of the collection system will carry out work necessary for completing the plan

## **Report**

A+E will prepare a report of the Overflow Control Plan for submittal to EPA incorporating the following information:

- Existing Information
- Results of Sewer System Investigations
- Updated sump pump inventory and assessments
- Sources of additional flow
- Alternatives evaluation
- Proposed project

A draft of the report will be submitted to the Town for review and an Overflow Control Plan in an electronic PDF format shall be submitted to EPA by December 31, 2017.

## **Review Meetings**

A 60% and 90% review meeting will be conducted with Town staff. In addition, A+E will meet at reasonable and customary intervals to provide a close liaison with the Town and any recognized authorities having jurisdiction in regard to the Overflow Control Plan.

## **Additional Services:**

The following services are not included in the scope of this Amendment, but may be provided at the request of the OWNER, upon issuance of a subsequent written Amendment:

- Television inspection
- Night-time flow gauging

## **Services Required by Others:**

The following services are to be performed by the OWNER or other agents on behalf of the OWNER. These services affect the ability of the ENGINEER to complete the scope of this Amendment.

- Dye testing
- Providing and regularly checking the flow meter equipment

**End of Attachment No. 1**