



ERIE COUNTY WATER AUTHORITY INTEROFFICE MEMORANDUM

September 29, 2020

To: Terrence D. McCracken, Secretary to the Authority

From: Leonard F. Kowalski, Executive Engineer & Clayton Johnson, Production Engineer *CFJ*

Subject: Contract GHD-007 - Guenther Pump Station Rehabilitation
Amendment No. 2 – Professional Services for Flow Control Altitude Valve Design
and Construction
ECWA Project No. 201800138

Attached is Amendment No. 2 to the Professional Services Contract with GHD for additional engineering services for the above referenced project.

During the preliminary design stage it was anticipated that a new butterfly valve (to replace the existing valve) would be sufficient to control water flow into the Guenther water storage tank. In addition, due to the small footprint of the pump station, an altitude valve would not fit within the pump station building. Based on ECWA's recent experience, during high demands over this past summer, it was evident that a more precise means of operating water storage tanks and controlling tank turnover is required. This was realized during detailed design of the Gunther Pump Station Rehabilitation. As ECWA looked into the use of an altitude valve we found a valve that could fit within the space requirements of the water storage tank valve chamber (located adjacent to the tank and separate from the pump station building), so the limited space within the pump station did not dictate valve type. The flow control altitude valve is more robust than a butterfly valve and will provide greater resiliency and flexibility to the Guenther Pump Station.

To put this pump station and project into perspective, the Guenther Pump Station is being redesigned to be used daily and has a small footprint when compared to the Ball Pump Station. Both Guenther and Ball will pump approximately 15-20 MGD on an average day and size wise Guenther is about one third the size of Ball. Space was a concern during the preliminary design phase, but the need for more robust flow control became evident once the detailed design phase was underway. The redesigned Guenther Pump Station is critical to ECWA and will be used to boost pressures and flows in southern Erie County, similar to the Ball Pump Station serving northern Erie County.

The use of an altitude valve for flow control is more consistent with ECWA's operations at other pump station facilities, such as: the Pine Hill Pump Station, Veterans Park Pump Station, Newstead Tank, Sandridge Tank, etc.

LFK:jmf
Attachments
cc: R.Stoll
CONT-GHD-007-1801-011

ERIE COUNTY WATER AUTHORITY
PROFESSIONAL SERVICES CONTRACT
AMENDMENT No. 2

Project No.	<u>201800138</u>	Contract No.	<u>GHD-007</u>
Job No.	<u></u>	EC No.	<u></u>
OWIP No.	<u></u>	Entered by/Date	<u>CJJ – 9/24/2020</u>

Title: Guenther Pump Station Rehabilitation – Flow Control Altitude Valve Design and Construction

Consultant: GHD

Description of Change to Contract:
Increase 3.D.1 – Design

Reason for Change:

The original scope of Professional Services included the installation/operation of a butterfly valve to control the flow of water into the Guenther water storage tank. Based on ECWA's recent experience, over this past summer with flow control into water storage tanks, a more precise means of controlling water flow is required to allow for increased flexibility to fill and cycle (turnover) water storage tanks. An altitude valve is more robust than a butterfly valve and will provide greater resiliency and flexibility to the Guenther Pump Station.

Compensation:


Revise 3.D.1 as follows – Design lump sum increase - \$21,000.00

APPROVED BY:

GHD

Erie County Water Authority

Robert P. Lannon, Jr., PE Date
Vice President

 09/29/2020
Leonard F. Kowalski, PE Date
Executive Engineer

Original Contract Amount	\$752,200.00
Contract Amount Prior to this Amend.	\$909,000.00
Amendment #2	<u>\$21,000.00</u>
New Contract Amount	\$930,000.00

Jerome D. Schad Date
Chairman