



AGENDA ITEM #: 23-89
COUNCIL MTG OF: August 15, 2023
FROM: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
OFFERED BY: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
PREPARED BY: M. Fowler, Public Works Director; T. Carrier, Deputy Public Works Director
SUBJECT: Manchester Rd Booster Pumping Station Pressure-Based Modifications

STAFF REPORT
Public Hearing 9-5-23

PURPOSE

The purpose of this document is to request Council approval to accept an additional NHDES grant to complete modifications to the Town's Manchester Road Water Booster Pumping Station (BPS) begun in 2022 which will permit its operation based on pressure.

TOWN ADMINISTRATOR COMMENTS:

The Town Council is urged to accept these funds to complete necessary modifications to the Manchester Road water booster pump station to ensure the integrity of the Derry water system as it wheels water through the Town as part of the Southern NH Regional Water Project.

BACKGROUND

In March 2022 the Council approved \$80,992.54 to fund modifications to Derry's Manchester Road water booster pump station (BPS) to allow for Derry's water storage tank to be taken out of service while maintaining consistent system pressures. The BPS is located on Manchester Road (Rte.28) in Derry at the point of entry to the Town's water system from Manchester Water Works (MWW). This station was built in 2019 as part of the Phase 1 Southern NH Regional Water Project. The Derry water distribution system has a single 4 million gallon (MG) atmospheric water storage tank. Because the system currently lacks redundant storage, water pressure in the core system cannot be reliably maintained if the storage tank is taken out of service. Currently, the Manchester Road Booster Pumping Station (MHT BPS) is designed to fill the tank at a fixed flowrate and turn on and off based on the water level in the tank.

DISCUSSION

The BPS modifications were completed and tested. During startup we experienced issues associated with the reaction time of the valves and program sequencing which resulted in unreliable operations and fluctuations in Derry's system pressure.

To address these issues, our engineers have developed an alternate operating strategy that does not require any process modifications but will require additional time for our systems process integrator to create and install a new program and time for the contractor, integrator, and valve tech to be on site to perform startup again.

This work will be added as a change order to our existing Regional Water Project contract with Hampstead Area Water Services Co. (HAWSCo.) who constructed the pump station.

FISCAL IMPACT

The estimated cost of this additional work is \$10,359.50 which includes \$2,124 for long lead time spare parts. Our engineers are not requesting any additional funding for the additional design or startup services.

NH DES has approved 100% grant funding for the project.

RECOMMENDED ACTION BY COUNCIL

It is recommended that the Council authorize the recommended work and authorize acceptance of unanticipated revenues from NH DES MtBE grant funding in the amount of \$10,359.14 to offset the project cost.

SUGGESTED MOTION:

Please see Resolution #2023-060



RESOLUTION Number 2023-060

To Accept a NH DES MtBE Grant for Water Division Pump Station Modifications

WHEREAS, Section 9.15 of the Town Charter authorizes the Town Council to accept grant funding; and

WHEREAS, the Town of Derry obtains water from the Manchester Water Works for its residents and other communities which participate in the Southern New Hampshire Regional Water Project (SNHRWP); and

WHEREAS, the SNHRWP required and paid for the construction of a booster pump station and storage facility to enhance the availability of water; and

WHEREAS, initial modifications to the station were required to maintain water quality and accessibility during maintenance periods and emergencies and approved under Resolution #2022-015;

WHEREAS, additional modifications to the station are required to enhance the functionality and reliability of the system;

NOW, THEREFORE, BE IT RESOLVED IN COUNCIL, pursuant to RSA 31:95-b, that the Town Administrator is hereby authorized to apply for, accept and expend \$10,359.50 from the NH Department Environmental Services MtBE grant program for completion of these modifications.

This Resolution shall take effect immediately upon its passage.

Adopted: September 5, 2023

Attest:

X _____

Charles Foote, Council Chair

Date: _____

X _____

Cristina Guilford, Town Clerk

Date: _____