

Resolution for Ithaca Area Wastewater Treatment Facility (IAWWTF) – Phase 4 Boiler Replacement

WHEREAS, in 2022, the Special Joint Committee (SJC) recommended to its municipal boards the approval of Phase 1 and Phase 2 funding for the replacement of a non-functional IAWWTF cast iron boiler in an amount, not to exceed, Six Hundred Fifty Thousand Dollars (\$650,000), and

WHEREAS, in 2023, additional related work under a Phase 3 project included pump replacement, boiler exhaust flue modifications, enhancements to combustion air intakes, glycol feeder improvements, automated controls, plumbing modifications for heat control, bonding, and engineering services for a cost, with contingencies, not to exceed, Two Hundred Fifty-Five Thousand Dollars (\$255,000), and

WHEREAS, during efficiency improvement work in Phase 3, plumbing, heat exchanger, valving, and general mechanical reconfiguration was made to eliminate unnecessary boiler capacity, invoke energy savings measures, and offer seasonal operational variability, and

WHEREAS, said modifications revealed several additional supportive improvements in other areas around the plant to ensure that efficiency and operability are mutually maintained, and

WHEREAS, J.W. Danforth has provided an 8 Item, Phase 4 cost proposal dated July 6, 2023, which includes the following items in an amount, not to exceed \$1,170,780.00:

Item 1: Additional Boiler Replacement - There are three remaining boilers that feed process specific systems at the plant including the digester, turbines, and general gallery areas. Two condensing Camus Boilers are in various states of disrepair and a recently non-functional HB Smith “dirty” methane boiler dating to the age of the plant must be replaced to meet upcoming winter demands. The cost for this work is \$ 695,690;

Item 5: Turbine Room Supply and Exhaust Venting - Existing turbines are located in an unconditioned room adjacent to the existing Boiler Room. These turbines are being treated with in room high temperature atmospheric air that is not suitable for operation which will cause short- and long-term efficiency and maintenance problems. The cost to bring outside makeup and exhaust venting will be \$59,400;

Item 6: Influent Building Air Handling Units - Air handling units in the Influent Building are blocked and corroded leading to hazardous atmospheric conditions for both equipment and personnel. The project involves the repair and coil replacement of three units in the amount of \$52,160;

Item 7: Sluice Gate Replacement – Influent slide gates which help to isolate flow into the Headworks Building no longer function and have deteriorated to the point where one has collapsed into the channel. The cost to replace the two units is \$168,400.

Now, therefore be it

RESOLVED, that the Special Joint Committee recommends its municipal boards expand the Boiler Replacement Project Scope to include the replacement of the Camus Condensing Boilers, the replacement of the HB Smith Methane Boiler, , the retrofit of the Administrative Building heating and cooling system, air handling improvements, , boiler and air handling controls, and sluice gate

replacement for a cost, not to exceed one million one hundred seventy thousand seven hundred eighty dollars (\$1,170,780.00) , which includes a 20% contingency inclusive of bonding and permit costs, and be it further

RESOLVED, that funds necessary for said replacements, modifications and improvements be derived from the following sources as determined by the City Controller: amendment to Capital Project 423J Boiler Room Evaluation, operating funds, Fund balance, serial bonds, capital reserves, grants, and Federal stimulus funds, and be it further

RESOLVED, That SJC hereby recommends authorization of this project contingent upon action by all wastewater partners committing their percentage of reimbursement shares to the Joint Activity Fund allocated per the Joint Sewer Agreement as follows:

Municipality	Percentage	Project Cost
City of Ithaca	57.14	\$668,984.00
Town of Ithaca	40.88	\$478,615.00
Town of Dryden	1.98	<u>\$23,181.00</u>
		\$1,170,780.00

Item 1 Additional Boiler Replacement	\$	695,690.00			
Item 5 Turbine Room Supply	\$	59,400.00			
Item 6 Influent Building Air Handling Units	\$	52,160.00			
Item 7 Sluice Gate Replacement	\$	<u>168,400.00</u>			
	\$	975,650.00			
20% contingency	\$	195,130.00			
inclusive of bonding and permit costs					
	\$	1,170,780.00			
City of Ithaca	\$	668,983.69			
Town of Ithaca	\$	478,614.86			
Town of Dryden	\$	<u>23,181.44</u>			
	\$	1,170,780.00			