

**DEPARTMENT OF
PUBLIC WORKS**

STREET ADDRESS:

150 S. Kendall Street
BATTLE CREEK, MI 49037

TELEPHONE: 269/966-3343 EXT. 1841

FAX: 269/966-3482

MEMORANDUM

To: Chris Huff, Purchasing Agent
From: Kurt Tribbett, Engineering Administrator
Cc: Chris Dopp, DPW Director
Cc: Carl Fedders, City Engineer/Assistant DPW Director
Cc: Perry Hart, Utilities Administrator
Cc: Richard Beardslee, Wastewater Superintendent
Date: May 8, 2017
Subject: WWTP Secondary Treatment System Upgrades

The City of Battle Creek's Wastewater Treatment Plant (WWTP) consist of three treatment elements: mechanical (Headworks and Primary), biological (Secondary), and sludge (Solids Handling) treatments.

The Secondary System for the WWTP is where the liquid waste is treated by biology – growing the correct bacteria to breakout solids and clarify the liquid for final disinfection. This project will improve the Secondary Treatment system by reducing electrical energy usage, improving treatment performance, reducing process cost, and reliability to the process while continuing to meet NPDES permit requirements. High horsepower blowers beyond their expected life cycle used for aerating liquid waste to promote bacteria growth will be replaced with efficient blowers that will save approximately \$225,000 per year in electrical use. New meters, analyzers, controls, and chemical feeds will be installed to properly introduce the right amount of chemicals at the right time to save approximately \$180,000 per year in chemical use. Additional piping, computerization controls and upgrades to electrical feeds will improve efficiency and reliability to the secondary system. The improvements are scheduled to take 18 months to complete.

On May 1 of this year, the Purchasing Department received three bids for the WWTP Secondary Treatment System Upgrades project. The apparent low bidder later that same day requested to have their bid withdrawn because they had a miscommunication with their electrical subcontractor that caused their bid to be over a million dollars too low. The second low bidder, Davis Construction and the third low bidder, Grand River had bids that were more reflective to the engineer's opinion of cost by Donohue and Associates. Therefore, the DPW is in agreement with Donohue's letter of requesting to award the project to Davis Construction for the WWTP Secondary Treatment System Upgrades.

The cost for this project is to be charged to 590.24.6590.801.310 – WWTP Rehabilitation

The project will be financed in part with proceeds from a Qualified Energy Conservation Bond previously acted on by City Commission, which is projected to save the project approximately \$2.7 Million in interest subsidies.

I am requesting that your office prepare a resolution for action by the City Commission for the May 16, 2017, City Commission meeting. Your cooperation is appreciated.

Feel free to contact me with any questions or comments.