20-087-3P Chemical Phosphorus Removal, O'Brien WRP

Construction Contract 20-087-3P Chemical Phosphorus Removal, O'Brien WRP is being financed by the Clean Water State Revolving Fund (SRF), SRF Loan No. L176201. The SRF program is administered by the Illinois Environmental Protection Agency and receives a portion of its money to fund these types of projects from the U.S. Environmental Protection Agency. SRF programs operate in each state to provide communities the resources necessary to build, maintain, and improve the infrastructure that protects one of our most valuable resources: water.

Service Area: North Location: O'Brien WRP, 3500 W. Howard Street, Skokie, IL 60076 Engineering Consultant: In-House Design General Contractor: IHC Construction Companies, LLC Contract Award Amount: \$14,226,000.00 Award Date: April 3, 2025 Contract Duration: 730 Calendar Days Loan Amount: \$13,067,832.48 Loan Interest Rate: 1.67% Loan Repayment Period: 24 years

Project Description: This project will provide a chemical phosphorus removal system at the O'Brien WRP. Aluminum sulfate (alum) will be used to remove phosphorus from the treatment process by dosing at the effluent channels of aeration tanks in Batteries A, B, C, D, and future Battery E. The project will include chemical storage tanks and alum feed pumps as well as piping, instruments, and electrical work. Chemical phosphorus removal will be used as a back-up for the future enhanced biological phosphorus removal process in Batteries A, B, C, D, and future Battery E.

Project Justification: This project addresses the MWRD's National Pollutant Discharge Elimination System (NPDES) permit, which will require a 1.0 mg/L effluent limit for phosphorus by 2027. The chemical removal system will allow the O'Brien WRP to achieve compliance with the NPDES permit phosphorus effluent limit during any upsets with the future enhanced biological phosphorus removal process in Batteries A, B, C, D, and future Battery E. This new facility will allow chemical polishing to ensure that the effluent phosphorus limitations in the NPDES permit are consistently met.

