

Village of Orland Park Filter Building Modifications at Centennial Park Aquatic Center

April 29, 2106

PROJECT BACKGROUND

The Village of Orland Park (VOP) has requested that the Prairie Forge Group (PFG) look into eliminating the need to dive into the existing surge tank located at Centennial Park Aquatic Center's Filter Building each pool season. This need has become a regular occurrence: each pool season, staff must dive into and clean out the vertical turbine pump strainers that are clogged with pool debris. The confined-space access is a concern for the VOP.

The long-term, complete solution is to redesign the filter pumps and change the type, layout, and location/arrangement within the Filter Building. This work will include (1) adding a new underground surge tank (outside the building footprint) to solely address water surge and (2) a mix of redesigning and renovating a new pump pit within the existing surge tank. This renovation would include new flooded suction pumps placed in an open-air pump pit that will be accessible by stairs with hand railings for regular/routine and safe maintenance of the strainers and pumps. The existing surge tank will be modified to meet current codes and allow for easier staff maintenance. PFG will provide the documents for bidding/permit/construction; the drawings and specifications will be required for the Village Building Department permit and the Illinois Department of Public Health (IDPH) permit review.

PFG will provide code-compliant drawings and specifications for the renovation of the Filter Building and surge tank that include the following: demolition drawings, floor plan/framing plan drawings, structural supports of walls and floors, ceiling drawing, interior elevations, and stair and hand rail details and drawings. A foundation drawing and grading plan that highlights the new surge tank east of the existing Filter Building. Also included will be aquatic, electrical, and structural engineering documents that identify the power, lighting, and pool piping requirements for the project.