

Case Study

"Flushable" wipes plagued an Austin, TX high-rise until they installed the OverWatch™ Direct In-Line Pump System by Industrial Flow Solutions

Overview

It is a story we hear time and time again; a submersible pump station requiring costly maintenance from a common villain: "flushable" wipes. But this story in Austin, Texas, finished with a happy ending, as the OverWatch Direct In-Line Pump System provided a solution to the cause of this troubling issue: the wet well.

In the city of Austin, Texas, a 23-story, 320-unit high rise building with a grocery store and restaurant, experienced pump station faults from clogged submersible pumps six times in two months. With each service, their service charges were excessive. The main culprit; "flushable wipes".

Being a residential building, they had no control over the materials that were flushed. The maintenance team had mailed multiple notifications regarding the issue, but there was no improvement. The team knew they needed a solution that was robust and hands-free. They had not budgeted for such exorbitant maintenance costs and needed to divert their focus back to providing an excellent living environment for their residents.

They selected the OverWatch Direct In-Line Pump System to solve their problems.



PROBLEM

- Constant clogging from "flushable" wipes
- Excessive maintenance cost from emergency service visits
- Offensive odors
- Maintenance costs from Fat, Oil, and Grease (FOG) removal

Solution

The service team of Pumps of Houston quickly removed the old antiquated submersible pumps, piping, rails, and control panel. Once all the equipment was removed, the 60" diameter fiberglass basin was completely washed and dried in preparation for the new dry-pit system. The OverWatch arrived on site from the factory pre-tested, pre-wired, assembled, and ready to be installed. Within two and a half hours, the former wet well had been turned into a dry pit and the installation of the OverWatch had begun 10 feet below ground. In a safe, clean, and dry environment, the team was able to connect the suction directly to the invert and construct the discharge piping. A sump pump was used in conjunction with the system to handle any water ingress from the hatch. The valve vault was no longer needed and could be removed during future construction. Over the course of just one day, the source of much pain and expense had been converted to a dry, clean, and reliable pump station.

Why OverWatch? By removing the wet well and lifting influent directly from the gravity invert, FOG and wipes do not have the opportunity to separate from the pumped liquid, keeping the fibrous material in solution and ejecting it as it arrives. Because the influent is contained, there is no potential for it to become atmospheric, eliminating all concerns for odor issues in the Texas heat. Lastly, the management team needed a robust and sustainable system, one that would detect and annihilate potential clogs without human intervention.

RESULTS

- Reduced potential for clogged pumps
- Eliminated need for wet well maintenance - no more vacuum trucks required
- Clean, dry, and reliable machine room
- No modifications needed to current well



Features

- Eliminates the wet well and hazards associated with it
- Adjusts pumps performance in real time based on environment
- Stainless Steel wetted components to eliminate corrosion
- Reduced maintenance, no cleaning, no pump downtime

Benefits

- Minimal cost to retrofit existing wet well
- New pump stations where excavation depths required are difficult and expensive to achieve
- Pumps are NOT prone to ragging/clogging
- Eliminate unpleasant sewage odors
- Handles influent with high concentrations of Fats, Oils and Greases

