

KENNEDY'S SUBMERSIBLE PACKAGE DECREASES MAINTENANCE COSTS

Problem: The City of St Clair, MI utilized Kennedy Industries to replace their problematic WWTP pumps. Based upon the success of that project, the City sought Kennedy Industries expertise to assist with another costly, and problematic issue. St Clair was experiencing extremely high maintenance and labor costs on a ten year old lift station. They were constantly going out to re-prime the station, changing out air compressors and repairing pumps. Not only was this costly and frustrating safety was a concern. Kennedy proposed a total package solution: new Flygt Submersible pumps, controls, and a pre-packaged fiberglass valve structure. The City obtained quotes from three other suppliers and chose Kennedy.



The City of St Clair's existing pump station before Kennedy's solution

“Kennedy Industries one piece molded above-ground fiberglass valve house”



Solution: Kennedy Industries solution to the inefficient use of VAC assisted pumps was to install guide rail mounted Flygt submersible pumps. The new Flygt pumps eliminated the need for compressors while maintaining easy accessibility to the pumps. The existing station design also provided a challenge; the influent pipe was very deep and the wet well was just slightly deeper, leaving only a very short operating span. This design combined with the City's old float system resulted in short cycling of the pumps. Kennedy supplied a new control panel equipped with variable frequency drives, PLC and submersible pressure transducer to obtain longer runtimes and eliminate excessive starts on the motor. The control system has the ability to run the pumps at lower speeds during non-peak events while running at full speed during peak events which will save St Clair costly motor re-builds and reduce energy consumption.

Kennedy supplied the one-piece, molded, above-ground, fiberglass valve house. The one-piece, molded fiberglass construction insures a leak and rust free unit, superior corrosion resistance and a clean look throughout the life of the station. This single piece house includes space for the control panel, check valves, plug valves and the addition of a bypass connection. The structure comes complete on a poly-concrete base with precast hatch which reduces the cost of installation and eliminates the need for a precast cookie top. The house is equipped on both sides with double door access with hold

KEY PERFORMANCE FEATURES:

- Heavily reduces maintenance costs
- Custom program to reduce pump starts
 - One piece fiberglass valve house
 - No more back breaking lid to open
- Custom fit to poly-concrete base for ease of installation

open arms. The double doors allow St Clair personnel convenient access to the structure without the requirement of special tools or lifting heavy lids.