

HUYLER STREET STORMWATER PUMP STATION

ANCIENT TECHNOLOGY / MODERN DAY APPLICATION

The Township of South Hackensack over the course of many years had experienced severe flooding conditions in the southern section of the town. This area was drained by the pre-existing Huyler Street Pump Station discharging into the East Riser Ditch and ultimately into the Losen Slofe which terminates at the Hackensack River. The ground surface elevations in the Township range from eight feet (8') to twenty feet (20') above mean sea level with many stormwater inverts below sea level. Although the four (4) pre-existing impeller pumps had a rated capacity of 20,000 gpm, they were unfit for the wet well and exhibited many deficiencies. The result was local flooding even during small storm events.

Boswell Engineering was initially directed by the Township to perform a comprehensive study and prepare a storm drainage map for the Huyler Street Pump Station. Following the collection of data, an extensive hydraulic study and review of various types of pumps, it was determined that positive displacement pumps were best suited to provide a long-term solution to the flooding conditions in this area.

Boswell Engineering was authorized by the Township to commence the design and selected Archimedes screw pumps which in its professional opinion would be the most effective in discharging a wide range of flow and meet all of the design criteria. This modern day innovative application of ancient technology has met all expectations and provided relief to this flood prone area. **Boswell Engineering is recognized as the first engineering firm in this geographic area to utilize Archimedes screw pumps for a stormwater pumping station.**



Firm:
Boswell Engineering
South Hackensack, NJ

Client:
Township of South Hackensack
South Hackensack, NJ