



PROJECT BRIEF

VD Parrott WTP Infrastructure Improvement

PROJECT PROFILE

CLIENT:
Max Foote Construction

LOCATION:
Dalton, GA

VALUE:

- Monitor existing utilities during blasting to ensure there were no adverse effects on the surrounding structures

SERVICES PROVIDED:

- Pre and post construction surveys for three existing structures
- Noise and vibration monitoring (vibration air overpressure monitoring)
- Installation of settlement monitoring points
- Real-time 24/7 automated data monitoring

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INSTALLATION OF GEOTECHNICAL INSTRUMENTS & VIBRATION MONITORING

Geocomp provided pre and post production surveys for three existing structures: the chemical building, raw water building and monitoring structure used to measure river levels. Services provided also include noise and vibration monitoring, vibration and air overpressure monitoring for blasting (low frequency) during construction, installation of four inclinometers and utility monitoring points. The monitoring points were prisms installed on pipes about 12-13 feet below the surface. Geocomp also provided settlement monitoring points for sheet pile on the shaft and installed automated motorized total stations (AMTS) which monitor reflective prismatic targets on sheet piles and existing utilities and structures. Finally, piezometers were added to measure groundwater levels adjacent to underground excavations. The critical component of this project was being able to monitor the existing utilities while the structure was being built. Also, while grouting was implemented, Geocomp played an important role in making sure the pipes did not break, ensuring that the water systems were safe.



BACKGROUND

The Dalton, GA V.D. Parrott Water Treatment Plant (WTP) had not been rehabilitated or improved in the last 20 years and was in need of updates. The upgrades to the WTP's core water plant infrastructure included replacement of the chemical treatment systems, new raw water pumping facilities and membrane filtration technology to further improve water quality. The utilities infrastructure improvements included the upgrade to a 50 MGD raw water pumping station; 42-inch to 54-inch raw water mains; 110 feet of hard rock tunnel for 54-inch DIP raw water main. Construction and tunneling activities are in proximity of existing utilities with blasting being performed under the main water intakes for the Whitfield Co. area. The estimated completion date for the project is spring 2022.