



WEST AREA CSO TUNNEL

Atlanta, Georgia

Original Contract: \$24,328,800
Change Orders: In progress
Final Amount: In progress
Contract Time: 885 days
Projected Completion: 12/2008

OWNER

City of Atlanta, GA
Department of Public Works
750 Selig Drive, Suite D
Atlanta, GA 30336

Contact: Mr. Ken Johnston

Phone: (404) 696-1697

ENGINEER

JDH, A Joint Venture
2551 Chattahoochee Circle NW
Atlanta, GA 30318

Contact: Mr. Mike Robison

Phone: (404) 352-0701

GENERAL CONTRACTOR

Atlanta CSO Constructors
(Obayashi/Massana JV)
2549 Chattahoochee Circle NW
Atlanta, GA 30318

Contact: Mr. Taro Nonaka

Phone: (404) 352-9802 ext. 210

PROJECT DESCRIPTION

As a solution for overflowing combined sewers, the City of Atlanta has undertaken a massive sewer construction program, which includes the West Area CSO Tunnel and Pump Station. This cornerstone project includes over 40,000 LF of 24' inside finished diameter hard rock TBM tunnel, a massive combined sewer pumping station, a series of interconnections to existing shallow combined sewers, and an overflow structure. The project is being built for the City of Atlanta under a \$210 million prime contract with the Obayashi Corporation. W.L. Hailey & Company, Inc. has been selected as a subcontractor to build the \$24.3 million pump station and associated tunnel construction.

Working within the existing R.M. Clayton WWTP site, W.L. Hailey sank a 73' diameter by 200 VF deep shaft down through the overburden and bedrock underlying the site. This shaft was sunk using conventional drill and blast methods, with ground support as required. From the bottom of this shaft, we drove a 1,200 LF of 28' diameter rock tunnel by conventional drill and blast methods. The tunnel was driven forward from the pump station shaft to meet the main TBM tunnel under construction by Obayashi, as well as to the overflow structure located downstream of the pump station. Following tunnel mining, the bore received a cast-in-place concrete lining.

Currently, the pump station shaft is receiving a structural concrete lining and will be fitted with twelve Flygt submersible pumps. Each pump motor is rated at 385 hp, and the pumps are fitted with 14" discharge nozzles. The pumps are rated for flows ranging from 5,300 to 11,400 GPM. With all pumps running, the pump station is capable of conveying from 91 to 197 MGD from the deep storage and conveyance tunnel to the plant headworks for treatment. The pumps are mounted in a conventional submersible pump arrangement, with a 14" base fitting, transitioning to a 24" stainless steel riser pipe which leads up to a collection header at grade. The pump station is completed with the addition of an electrical control building and a massive bridge crane.

This project will be built under the direction of our Atlanta Group Manager, Randy Wiek. Work on this project commenced in the late fall of 2004, and is scheduled for completion in 2008.

