



Construction of the Flushing Bay Corona Avenue Vortex.

Flushing Bay CSO Retention Facility

Queens, NY

Mueser Rutledge Consulting Engineers (MRCE) recommended a monitoring program to evaluate the effect of driving sheetpiling on adjacent structures at the Flushing Bay CSO Retention Facility in Queens, NY. This work was undertaken on behalf of the New York City Department of Environmental Protection (NYCDEP). When it was found that noise and vibration levels were too high and settlement of the nearby ground surface was too great plus the sheeting could not be driven to the required depth, the contractor proposed use of a soil mix wall (SMW). The firm reviewed the pile driving submittals and observed the monitoring data and attempts to drive the sheeting further and advised the client on the use of an SMW wall. Estimates of the cost of the SMW wall were prepared to aid in evaluating the contractor's proposal. MRCE reviewed and commented on the SMW shop drawings, assisted in review of the contractor's progress in the field, advised on monitoring of performance, provided site inspection, and reviewed proposed methods of penetrating obstruction.

At the effluent channel, MRCE provided inspection of pile load test, pile driving, and mini-piles.