



MRCE designed slurry walls for two deep basements at the World Financial Center in the Battery Park City landfill. Top Right: A slurry wall surrounds the basement of Building D.

World Financial Center, Battery Park City

New York, New York

Mueser Rutledge Consulting Engineers (MRCE) served as the general geotechnical consultant for the foundations for the five-building World Financial Center complex located in the Battery Park City landfill at the southwestern tip of Manhattan Island. For this large scale project, MRCE services included:

- designed a boring, testing, and field instrumentation program
- field inspection of all foundation construction
- design of a pile load test program, and inspection of the pile load tests
- design of all foundations
- design of the roadway support systems, including roadway deck and piling
- designed all the support systems for the public areas, including platforms, piling and bulkheads
- designed slurry walls for two deep basements for major office buildings. Slurry walls were carried to rock at depths of 40 to 80 feet below grade
- designed all excavation bracing for the deep foundations
- designed drilled-in caissons and piling two major buildings and pedestrian bridges
- provided design criteria for temporary excavation support and dewatering
- designed and inspected the installation of caissons adjacent to operating PATH commuter rail facilities
- evaluated construction monitoring; provided construction inspection required by site conditions and development work
- provided design modifications to address changed site conditions and work additions