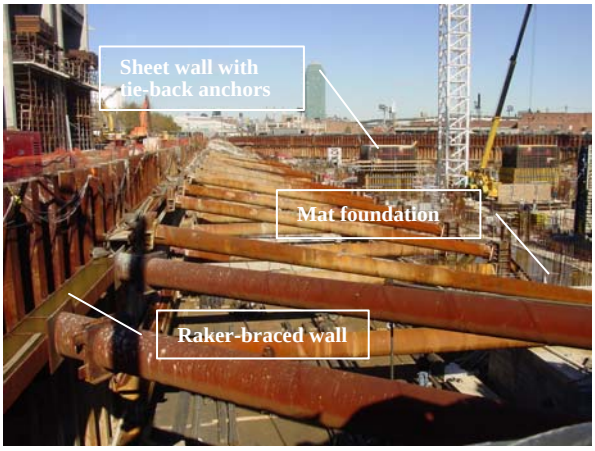
Mueser Rutledge
Consulting Engineers



Above: Construction of the Digester Building includes 9 foot thick mat foundations, sheet walls with tiebacks and a raker-braced wall, all MRCE designs. At right: *Looking southwest toward Manhattan, the digester tanks are under construction in the foreground of the photo taken in 2004. The eight digesters rest on 9 foot thick mat foundations.*

Newtown Creek WPCP Expansion

Brooklyn, NY

The Newtown Creek Water Pollution Control Plant is situated in the heavily industrialized Greenpoint section of the Borough of Brooklyn in New York City, immediately south of Newtown Creek. The plant is being upgraded to meet the wastewater treatment standards of the Clean Water Act within the constraints of a United States Environmental Protection Agency (USEPA) Consent Order. Facility upgrading will result in construction of additional wastewater treatment facilities to provide secondary treatment and nitrogen removal, and improve the plant's ability to handle combined sanitary and storm flows in wet weather. For the upgrade, the site area will be enlarged from 36 acres to approximately 53 acres. For the expansion, the City of New York DEP acquired three adjoining properties. Mueser Rutledge Consulting Engineers (MRCE) is providing geotechnical and foundation engineering services for this major expansion of the existing plant situated in an area containing contaminated groundwater. MRCE Services to date have included:

DESIGN:

- Subsurface investigations
- Caissons
- Minipiles
- Secant pile wall
- H-piles, pipe piles, timber piles
- Sheeting and bracing (low permeability sheeting, cantilever, cross-lot struts, rakers)
- Vibrocompaction
- Chemical grouting
- Settlement analyses
- Dewatering analysis
- Pumping tests
- Tiebacks
- Microtunneling

CONSTRUCTION SUPPORT:

- Tieback installation and testing
- Load testing (STATNAMIC, static compression, lateral, and uplift)
- Shop drawing/submittal review
- Subgrade inspection
- Settlement monitoring
- Minipile inspection
- Grouting
- Microtunneling