

# Former Commercial Service Station and Manufacturing Facility

*Manhattan, New York*

The redevelopment (Site) is a 0.45-acre parcel in the Chelsea section of Manhattan, New York. The Site was formerly used as a multi-level parking garage, commercial vehicle maintenance and gas meter manufacturing. The Site was enrolled in the New York State Department of Environmental Conservation Brownfield Cleanup Program (NYSDEC BCP) and FLS was contracted as the lead environmental consultant to oversee remediation and navigate the project through the program. FLS provided technical support during remedial investigation and action, administrative support to ensure environmental closure and post-remedial monitoring services.



*Overview of the Site facing south towards 21<sup>st</sup> Street.*

FLS conducted a Phase I Environmental Site Assessment identifying Recognized Environmental Conditions connected to former Site operations. Under the BCP, FLS planned and executed a Remedial Investigation to characterize soil and groundwater impacted by historic gas meter manufacturing and a release from a petroleum underground storage tank (UST). Results of the investigation found concentrations of gasoline-related volatile organic compounds in soil and groundwater along with various semi-volatile organic compounds (SVOC), metals and pesticides in urban fill. Elevated concentrations of VOCs were detected in sub-slab soil vapor samples as well.

FLS prepared a Remedial Action Work Plan detailing the proposed remedy and redevelopment plan to construct a multi-story commercial use building. The Site remedy proposed two cleanup tracks: (i) a Track 2 cleanup meeting the Commercial Use Soil Cleanup Objectives (CUSCOs), and (ii) a Track 4 cleanup with engineering

controls consisting of an environmental cap. Remedial actions included removal of petroleum impacted source material in the former UST area, removal of urban fill containing elevated concentrations of metals and semi-volatile organic compounds.



*View of hot spot excavation on Site.*

Throughout remediation, FLS implemented a Community Air Monitoring Plan, tracked soil disposal and backfill import and oversaw installation of engineering controls including a composite cover consisting of a vapor membrane and concrete cap with a sub-slab depressurization system to mitigate potential vapor intrusion. A Certificate of Completion was received in 2016 from the NYSDEC, qualifying the site owner for Brownfield Tax Credits. Following completion of the development, FLS continues monitoring and maintenance of the engineering controls under the Site Management Plan.