

Chelsea Mixed Use Redevelopment Site

Manhattan, New York

The redevelopment (Site) is a 0.2-acre parcel comprised of three tax lots located between Tenth and Eleventh Avenue in the Chelsea section of Manhattan, New York. Prior to redevelopment, the Site was used as an auto repair shop, commercial space and vacant buildings. Each lot is registered with an “e” designation for hazardous materials, noise receptors and air quality (E-142). The site was enrolled in the NYC Voluntary Cleanup Program (NYC VCP) which granted benefits including a liability protection and exemption from hazardous waste soil disposal fees. FLS was selected as the lead environmental consultant to navigate the project through the requirements associated with the “e” designation and fulfillment of requirements in NYC VCP.



Auto repair and vacant buildings prior to redevelopment.

FLS conducted a Phase I Environmental Site Assessment identifying Recognized Environmental Conditions including an underground storage tank (UST), in-ground hydraulic lifts and a listed New York State Department of Environmental Conservation (NYSDEC) Spill. Based on these findings, FLS planned and executed a Remedial Investigation to characterize soil and groundwater conditions at the site. Results found extremely elevated concentrations of arsenic detected in shallow and deep soil at the site as well as in surrounding groundwater. The lead regulatory agency, NYC Office of Environmental Remediation (OER), originally required excavation and removal of all arsenic-impacted soil including soil at depths below development grade, which would have hindered the project’s budget and schedule. FLS successfully worked towards a resolution acceptable to OER and the developer using data and remediation examples in the surrounding area to limit the scope of the excavation to 15 feet below grade (fbg) across the site and to 5 fbg in a 10-foot set-back area. FLS proposed the use of institutional controls, engineering controls (EC) and construction elements (i.e. interlocking sheet piles installed into bedrock around the general site perimeter) to minimize over time the migration of groundwater onto the Site from surrounding offsite sources of contamination.



Excavation and disposal of impacted soil.

FLS also prepared an Air/Noise Remedial Action Plan to address the “e”-designation requirements and proposed a 5 dBA reduction in the noise requirements based on the specifics of the E-142 Environmental Impact Statement which was accepted BY OER.

Throughout remediation, FLS implemented a Community Air Monitoring Plan and oversaw the excavation and disposal of contaminated soils, removal of an UST and installation of ECs. Remediation associated to the “e” designation for hazardous materials was completed in 2016. Implementation of the Air/Noise Remedial Action Plan and Site Closure is expected in 2017.