

"The overall goal of this work was to determine the potential geotechnical and environmental problems at this Brownfield Site and find ways to mitigate the concerns so Pradera II could move forward."

Client: Pradera Corporation

Urban Engineers (Urban) was retained to perform environmental and geotechnical services on a four-block redevelopment site proposed for 55 new townhomes known as Pradera II in North Philadelphia. Urban's responsibilities were to evaluate potential environmental and geotechnical issues at this Brownfield Site and develop ways to mitigate the concerns so housing construction could proceed.

HIGHLIGHTS:

- Brownfield Site Investigation
- Cost Savings
- Risk Analysis
- Geotechnical Evaluation
- Asbestos Remediation



A Phase I environmental site assessment was performed, followed by site characterization activities. Soil conditions were tested to provide information on contamination issues and the ability of the soil to support the new housing's foundations and structures.

Urban had three primary responsibilities for this project. First, a site characterization was performed that included gathering soil samples from test pits. A soil remediation was also performed in which lead-containing soil was excavated and disposed of in a permitted facility. Also, a building survey for USTs, asbestos, and lead-based paint was performed on 16 homes. Urban recommended steps to address identified environmental issues and prepared asbestos investigation reports in accordance with the City of Philadelphia's asbestos regulations.

Geotechnical issues were evaluated by excavating a series of test pits to evaluate foundation conditions in the vicinity of the demolished basements. A geotechnical investigation report was prepared to describe the investigation, discuss the results, and provide recommendations for foundation design and construction. Deep dynamic compaction was recommended as the most cost-effective approach to improving the soil's structural capacity.

