

## *Environmental Engineering Services*

---

Multi-Lynx Companies, Inc. has expertise in all phases of environmental engineering analysis, including environmental impact studies, water quality analyses, waste disposal, wetland studies, environmental site remediation services, and brownfield development.

Multi-Lynx personnel have conducted several hundred Phase I, Phase II and Phase III Environmental Site Assessments. Some of the assessments resulted in the development of risk analysis and the subsequent development of innovative and fast track remedial solutions for contaminated properties in order to overcome traditional obstacles to property acquisition and development.



*Recovered Subsurface Material*



 **Client Challenge**

The Borough of Wilkinsburg, in the East End of the City of Pittsburgh, Pennsylvania, has been under Act 47 of the Commonwealth of Pennsylvania for more than one decade. The Borough has a very low tax base and high unemployment rate. There are few revenue-generating enterprises within the Borough. Wilkinsburg was a vibrant and prosperous historic suburban neighborhood of the City of Pittsburgh during the middle 19th Century and early 20th Century. Immigrants to the United States from Western Europe populated the Borough and developed thriving and prosperous businesses. Not only did Wilkinsburg serve as a bedroom community for the thriving steel industry in Pittsburgh, it also served as a service hub for other supporting industries in southwestern Pennsylvania.

The decline of the steel industry in the late 1970s and early 1980s saw a decline in the fortunes of Wilkinsburg. With suburban neighborhoods developing much further away from the core of the City of Pittsburgh, Wilkinsburg saw further erosion of its population and tax base.

 **Scope of Work**

Multi-Lynx Companies, Inc. provided professional environmental site assessment and subsurface investigation services to the Allegheny County Department of Economic Development and a private real estate developer for the development of a former shopping center site in the Borough of



**Recovered Soil Samples**



**Soil Sampling**

Wilkinsburg, in order to facilitate commercial retail development of the site. The inner-ring shopping center site was vacant but preliminary data suggested that environmental impairment threatened the proposed development.



Multi-Lynx conducted Environmental Site Assessments for the purposes of investigating the magnitude and extent of the presence of petroleum, organic chemicals, metals, and asbestos on the property. The assessment included a detailed topographic survey of the site, subsurface test borings, installation of groundwater monitoring wells, and sampling of soil, fill, and groundwater. The assessment results revealed the presence of dry cleaning solvent in the groundwater, and petroleum and metals in the fill, confined to a small portion of the property.

The data, adjacent land use, and local records indicated that the source of the solvent was a release at an adjacent dry cleaning supply facility. The petroleum impacted fill evidently was brought to the site from another property where a leaking underground storage tank had been removed. The impacted groundwater was migrating towards a proposed stormwater retention basin for the new commercial development.

## Multi-Lynx Value

Prior to developing the most feasible approach for environmental site clean-up, the Multi-Lynx project team met with federal and state environmental regulatory agency officials to review the available options and to determine agency preferences. Thereafter, the Multi-Lynx project team developed a conceptual plan that achieved the following objectives.

1. ***Demonstrated that the fill and groundwater could be managed at a cost that was compatible with the proposed development plan, and in accordance with a risk-based remedial strategy that satisfied Federal and State environmental regulatory standards, and***
2. ***Implemented engineering and institutional controls, including an aerator in the stormwater basin, to ensure that the impacted groundwater would not pose an unacceptable environmental risk, while enhancing the aesthetic amenities of the proposed development***



*Project Site Looking South-West*



*Panoramic View of Project Site*

### **Project Location**

Borough of Wilkinsburg  
Allegheny County, Pennsylvania, USA

### **Client**

CB Richard Ellis, and  
Allegheny County Economic Development Department

### **Project Task Orders**

- ✓ Project Management and Coordination
- ✓ Subsurface Investigations
- ✓ Environmental Assessment
- ✓ Topographical Survey
- ✓ Permitting Assistance



## **Client Challenge**

During the middle 1980s, the City of Pittsburgh, Pennsylvania experienced rapid decline in population and economic activity. Most of the workforce within the City commuted from suburban neighborhoods. Every weekday, after 6.00 p.m. the City was deserted for the suburbs. There were little or no activities in the downtown section of the City. Through studies conducted by regional and national agencies, the City of Pittsburgh became aware of the need for high quality residential housing, specifically designed for the City's workforce. Such housing would promote the re-growth of City neighborhoods.

Multi-Lynx was retained to provide planning and comprehensive engineering services to the Manchester Citizens Corporation, MCC, for the development of a 4.3-acre property that has been abandoned for more than 10 years. Services that Multi-Lynx provided include project management, environmental site assessment, site remediation, geotechnical engineering, construction management, cost estimates, and engineering services during construction, among others.

## **Scope of Work**

Multi-Lynx began an initial task of environmental site assessment of the abandoned property, formerly used to house a lighting fixtures manufacturing facility. The property, which is located in a residential urban setting, has remained undeveloped due to longstanding concerns over environmental contamination resulting from the manufacturing operations. The proposed development on the site will consist of a mix of high-density residential townhouses and light commercial facilities.



*Project Site – Soil Sampling Activity*



*Project Site – Looking North*

The environmental site assessment included the drilling of several test borings and installation of monitoring wells. Soil samples were collected and analyzed in the laboratory for the presence of petroleum, organic chemicals, and metals. Groundwater samples were collected and analyzed in the laboratory in accordance with regulatory environmental health standards.

This project is being financed by a public-private funding partnership. Multi-Lynx is currently pursuing a “no-risk” clearance from State environmental regulatory authorities, following which construction will commence

