

South Sheridan Corporate Centre Redevelopment

South Sheridan Way, Mississauga ON

PROPERTY DESCRIPTION

Kilmer Brownfield Management Limited (Kilmer), manager of the Kilmer Brownfield Equity Fund (Fund), successfully completed the remediation and subsequent sale of an 11-acre former medical supply manufacturing facility in the City of Mississauga. The property is located on a service road adjacent to the Queen Elizabeth Highway and was appropriately positioned for a land use requiring high visibility. The City-initiated and approved amendments to the zoning by-law (which supported higher order office commercial land uses compared to its previous history of heavy manufacturing) reflect the site's strategic location and access to key transportation networks and existing infrastructure and services.

SITE RESTORATION

As part of the property purchase, Kilmer was able to successfully address the residual environmental liability concerns of the previous owner and maximize their value in the transaction. To support the transaction, Kilmer completed supplemental site characterization assessments to reclassify the site appropriately.

One of the objectives of the remedial strategy developed by Kilmer was to remediate and reuse as much material on-site as possible. Kilmer's site activities included the demolition of an 180,000 sq ft purpose-built manufacturing facility (98% of building materials were recycled) followed by site remediation and obtaining regulatory site closure from the Ontario Ministry of the Environment (MOE) through the filing of two Records of Site Condition (RSCs).

Through the supplemental site characterization assessments, it was determined that soil and groundwater at the site was impacted by organic parameters related to plasticizers that were a result of on-site medical glove manufacturing, as well as other industrial solvents that were emanating from other manufacturing properties. Aged sanitary sewer infrastructure through the property acted as a preferred pathway for the migration of solvents on the property. A watercourse on the property boundary required consideration for natural heritage features when preparing the remedial strategy risk assessments and overall site redevelopment plan.

The integrated site remediation program included two risk assessments and involved source removal, product recovery, groundwater treatment and air quality testing. The site remediation program addressed soil and groundwater that was impacted by various organic parameters by remediating to generic and risk-based standards, following MOE regulations. Site works also included the replacement of the aged sanitary sewer infrastructure on the property. In total, approximately 50,000 tonnes of soil were managed during the remedial process on the site. Regulatory site closure was obtained through the filing of two RSCs (one for industrial commercial use and the other for residential/parkland). Kilmer also placed a specialized environmental insurance policy to provide supplemental assurance and support for site redevelopment.

STAKEHOLDER DIALOGUE

Kilmer worked closely in consultation with all stakeholders, including the MOE, the City of Mississauga, Region of Peel Health and Mississauga Hydro, as well as the residential neighbourhood community organization and local City Councillor. Satisfying the stakeholder perspectives and maintaining clear communication with all stakeholders was fundamental to the overall success of the project, which was completed on time and on budget. The remediation and the repositioning of the site provided clear benefits to the community and Kilmer enjoyed a high level of support for the project from local the residents and government alike.



On-site remediation activities.

Lake Shore Mid-Density Residential Redevelopment Project

Lake Shore Boulevard West, Toronto ON

PROJECT DESCRIPTION

The redevelopment of this 11-acre former automotive parts manufacturing facility in the Long Branch area of the former City of Etobicoke was a joint-venture project with the Whitecastle New Urban Fund (managed by DiamondCorp) and the Kilmer Brownfield Equity Fund (Fund). DiamondCorp was responsible for the planning approvals to obtain a new mixed-use, mid-density community (400 to 500 residential units) with new public open space and amenities. Kilmer Brownfield Management Limited (Kilmer), manager of the Fund, developed and implemented the remedial strategy to support these new and more sensitive land uses. Located just north of Lake Ontario in the heart of the Long Branch neighbourhood, the site provides easy access to public transit, including the Toronto Transit Commission's Lake Shore street car line and GO Transit's Long Branch station. The site layout, land uses and built form of the redevelopment were influenced by the environmental condition of the property, the requirements of the City and the needs of the marketplace.

SITE RESTORATION

As part of the property purchase, Kilmer was able to successfully address the residual environmental liability concerns of the previous owner and maximize their value in the transaction. Soil and groundwater was impacted on the site by various chemical parameters common to many industrial facilities (petroleum hydrocarbons, solvents and metals) as a result of the manufacturing processes that had been conducted on the property and from neighbouring industrial sites. Kilmer completed a substantial supplemental sub-surface investigation to fully characterize the extent of soil and groundwater impacts prior to establishing a remedial solution. The 244,000 sq ft industrial building was demolished and over 95% of the building materials were recycled.

The site's remedial strategy included risk-based standards derived following the Ontario Ministry of the Environment's (MOE's) new streamlined risk assessment process, Tier 2 (Modified Generic Risk Assessment, MGRA) and Tier 3 Risk Assessments (RAs). A key remedial objective was to implement a more sustainable remedial strategy, compared to more traditional remediation approaches (i.e. "dig and dump"). This involved mixing both Zero Valent Iron (ZVI) and clay into soil and groundwater contaminated with solvents to treat source locations. The on-site treatment and reuse of soil is a considerably more sustainable remedial approach compared to traditional landfill disposal and clean soil importation. Groundwater and soil management were also critical components of the overall remedial strategy, where soil was segregated and stockpiled according to the type of contaminant impact, and accumulated water was treated and, when municipal standards were met, discharged to the municipal sanitary sewer system.

Kilmer also placed a specialized environmental insurance policy that provided supplemental assurance and support for the site's redevelopment. The final built-form will incorporate several risk management measures, including underground or at-grade parking directly beneath any residential unit to act as a separation barrier between the sub-surface and residential uses, incorporating the new MGRA standards.

STAKEHOLDER DIALOGUE

The site was part of the MOE's pilot study for the Tier Two RA process, and Kilmer worked closely with the MOE to provide input as it developed proposed regulatory reforms to the province's updated brownfield legislation (O. Reg 511/09). The implementation of the ZVI-clay remedial program was made possible in part by the federal non-profit foundation Sustainable Development Technology Canada (SDTC). The MOE and the Ontario Centres of Excellence acted as Observers of the SDTC-supported ZVI-clay remedial activities at the site, and support from the local City Councillor facilitated meaningful consultation with the surrounding neighbourhood.



Remedial activities at the site

KILMER BROWNFIELD EQUITY FUND L.P.

Mid-to High-Density Residential Redevelopment Project

Boulevard Marcel-Laurin, Saint-Laurent (Montreal), QC

PROPERTY DESCRIPTION

This 13-acre former aerospace manufacturing facility is located at the gateway of the Borough of Saint-Laurent in the City of Montreal in an area that has been transitioning from heavy industrial uses to mid-density residential uses over the last decade. The site is located within a kilometre of the subway system just west of downtown Montreal, and has become a popular area for new Montreal residents, as well as for couples and young families in which to settle.

Kilmer Brownfield Management Limited (Kilmer), manager of the Kilmer Brownfield Equity Fund (Fund), purchased the property to reposition it for mid-density residential uses, ranging from 4 to 8 storeys in height across the property. Upon build-out, this property will contain approximately 800 to 1,000 new residential uses, will maximize existing infrastructure and services in the area and create a community that will complement and enhance the existing established neighbourhood.

Activities began with the demolition of the 215,000 sq ft industrial building and the extended discussions with the Ministère du Développement Durable, de l'Environnement et des Parcs (MDDEP) of the Province of Quebec for the approval of the remediation strategy.

SITE RESTORATION

As part of the property purchase, Kilmer was able to successfully address the residual liability concerns of the previous owner and maximize their value in the transaction. At this site, the soil and groundwater were impacted by a range of organic and inorganic parameters common to industrial facilities, including petroleum hydrocarbons, solvents and metals.

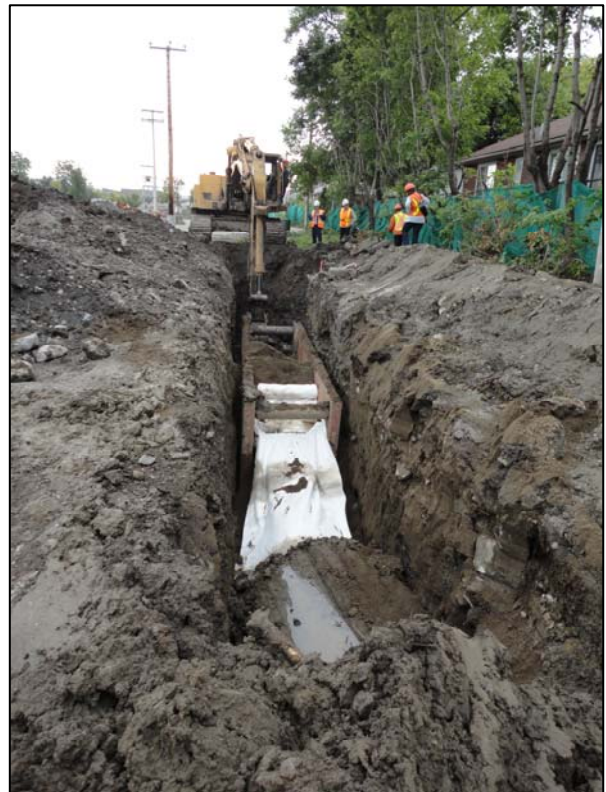
Although the site was well characterized prior to Kilmer's acquisition, an additional supplemental sub-surface investigation was conducted to further characterize soil and groundwater impacts on the site. A site-specific Risk Assessment (RA) was developed by Kilmer and accepted by the MDDEP, which reflected Kilmer's remedial objective of managing metal-impacted fill material on-site to support a more sustainable remedial solution.

To achieve residential MDDEP standards, the remedial approach included on-site soil treatment (bio-remediation) and the reuse of soils impacted by organics, and transportation of the heavily impacted soils to an off-site soil treatment facility. In addition, Zero-Valent Iron (ZVI) was mixed with segregated soils to support groundwater treatment as a best-practice measure. A permeable reactive barrier was also installed along a portion of the property boundary to attenuate any remaining groundwater impacts once the contaminant source areas were remediated.

Anticipated risk management measures to be implemented as part of the redevelopment include soil capping and the provision of underground parking and/or structured parking to separate the sub-surface from residential uses. Kilmer also placed a specialized environmental insurance policy to provide supplemental assurance and support for site redevelopment.

STAKEHOLDER DIALOGUE

Consultation with the MDDEP, the Borough of Saint Laurent, neighbours and other stakeholders was a key component of obtaining approval for and implementing the remedial strategy. Continued dialogue with the adjacent private school and residential neighbours played an important role ensuring the successful implementation of the remedial program.



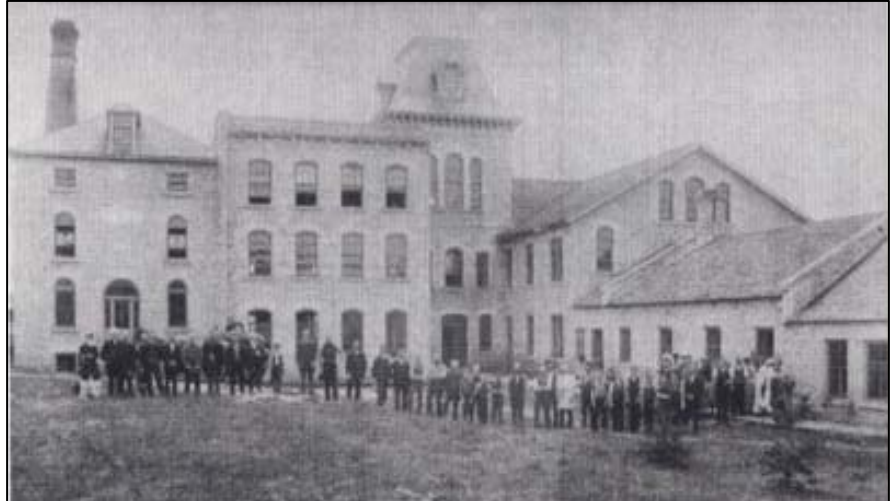
Installation of Permeable Reactive Barrier (PRB).

Mid-to High-Density Residential Redevelopment of a Historical Distillery

Arthur Street South, Guelph ON

PROPERTY DESCRIPTION

Kilmer Brownfield Management Limited (Kilmer), managers of the Kilmer Brownfield Equity Fund (Fund) purchased this 9-acre property, which is located adjacent to the Speed River and downtown Guelph and is within a unique established residential neighbourhood. Over its industrial lifetime, the site had previously been occupied by a distillery, a foundry, a woollen mill company, and appliance manufacturing operations dating back to 1835, and contained several historical limestone and brick buildings.



Employees of Guelph Woollen Mills Company Ltd gathered in front of the limestone heritage buildings, c. 1895 (Image source: City of Guelph)

The site is located within Guelph's *Urban Growth Centre* (as stipulated by the Provincial Growth Plan, *Places to Grow*) and is within walking distance of the existing VIA Rail and forthcoming GO Transit rail stations. Redevelopment of the site supports Guelph's intensification initiatives and will support the variety of existing amenities and services available in the downtown core.

The property has many unique challenges including: retaining heritage buildings and features; grading differences across the site; flood plain issues related to the adjacent river; and aging and failing infrastructure traversing the property in several locations. These challenges impact how the site may be redeveloped, requiring innovative design and remedial solutions. At the time of Kilmer's acquisition of the property, the City was in the process of preparing a new Secondary Plan for the downtown and this area to implement the Urban Growth Centre requirements of the *Places to Grow*. The Secondary Plan impacted the redevelopment considerations for land uses, built form, height and site layout for the property.

SITE RESTORATION

Given the range of the previous industrial land uses, the types of subsurface impacts vary across the property, including a significant volume of upper-fill materials that have been impacted by various metals. Soil and groundwater were also impacted by other common industrial parameters, petroleum hydrocarbons and solvents. A risk-based remedial strategy was established to respond to these unique site characteristics and the sensitive receptors (adjacent river and residential uses), as well as Kilmer's objective to implement a more sustainable remedial approach when compared to conventional remedial solutions by recycling the upper fill materials on-site, where possible. The use of Zero-Valent Iron (ZVI) as an amendment to solvent-impacted areas further addressed impacts to groundwater and soil, and assisted in reducing the volume of impacted material that required off-site disposal. The planned redevelopment includes a mix of land uses, including mid-to high-density residential and office uses and the adaptive re-use of the retained historic limestone buildings. This project will incorporate risk management measures to address the risk-based remedial approach, such as the provision of below- or at-grade parking with residential uses above to provide separation between the sub-surface and sensitive land uses.

STAKEHOLDER DIALOGUE

Extensive consultation with the Ministry of the Environment (MOE) and other stakeholders (the City, the Grand River Conservation Authority and the local neighbourhood organization) was a critical element of planning for the site's redevelopment. Regular dialogue between Kilmer and local residents ensured that neighbours were aware of all site activities and helped to play an important role in planning for the site's future redevelopment.

KILMER BROWNFIELD EQUITY FUND L.P.

38-Storey Residential Condominium with Retail Uses At Grade

Wellesley Street East, Toronto ON

PROPERTY DESCRIPTION

The redevelopment of this 1/3 acre former service station is a joint-venture project with the Whitecastle New Urban Fund (managed by DiamondCorp) and the Kilmer Brownfield Equity Fund (Fund). Diamondcorp is responsible for the rezoning of the site and the conceptual design of the 38-storey residential condominium building (approximately 250 units) with retail commercial uses at grade and five levels of underground parking. Kilmer Brownfield Management Limited (Kilmer), managers of the Fund, was responsible for preparing and implementing a remedial strategy to support the planned redevelopment. The site is located within walking distance to both the Yonge and Bloor subway lines and is within an established community that has recently witnessed a variety of major intensification projects that are enhancing the vibrancy of this downtown neighbourhood. Redevelopment of the site will contribute towards the changing dynamics of this area.

SITE RESTORATION

As part of the property purchase, Kilmer was able to successfully address the residual environmental liability concerns of the previous owner, a major oil company. As a result of the site's previous use as a service station since 1930, soils and groundwater were extensively impacted at considerable depths (>10 metres) with petroleum hydrocarbon.

The remedial plan included the removal of underground storage tanks and fuel pumps and the construction of a caisson wall to mitigate groundwater impacts at the property boundaries. The caisson wall will become part of the parking structure once ultimate build-out occurs, forming a risk management measure to provide an appropriate barrier between the subsurface and any occupied building space. The removal of impacted soil and groundwater will be coordinated with the construction of the underground parking structure. Kilmer also placed a specialized environmental insurance policy to provide supplemental assurance and support for site redevelopment.

STAKEHOLDER DIALOGUE

Due to this site's close proximity to existing residential and commercial uses, as well as various institutional uses including an elementary school, communication with neighbours was critical to ensure that implementation of the remedial program minimized any disturbances or nuisances to neighbours, while allowing the project to proceed on time and on budget. The complete on-site source removal of petroleum hydrocarbon impacts assisted with the ongoing remediation, management and attenuation of groundwater impacted by petroleum hydrocarbons.

As an interim use of this former service station in a well established neighbourhood, Kilmer and DiamondCorp were proud to support Art City, a non-profit organization committed to providing after school art programs to the children and youth of the local community. Through a summer arts program, Art City created vibrant art panels to adorn the hoarding along the two street frontages of the site, which will likely remain in place for several years.



Removal of underground storage tank.

KILMER BROWNFIELD EQUITY FUND L.P.