

FINAL

Geo-Environmental Investigation

2441 Lakeshore Road West Oakville, Ontario

Prepared for:

Crombie REIT

5935 Airport Road, Suite 810 Mississauga, ON L4V 1W5

Attn: Robert Blacklock

Senior Director, Development

April 8, 2016

Pinchin File: 113201.002





Reviewer:

Geo-Environmental Investigation April 8, 2016 2441 Lakeshore Road West, Oakville, Ontario Pinchin File: 113201.002 FINAL

Issued To: **Crombie REIT** Contact: **Robert Blacklock**

Senior Director, Development

Issued On: April 8, 2016 **Pinchin File:** 113201.002

Issuing Office: 2470 Milltower Court, Mississauga, ON L5N 7W5

Gary Drummond

Primary Pinchin Operations Manager/Senior Consultant

Contact: 905.363.1322

2016.09.30 08:17:16 -04'00'

2016.09.30

Author: Gary Drummond, C.E.T.

Operations Manager/Senior Consultant

905.363.1322

gdrummond@pinchin.com

08:16:34 -04'00'

Robert Tossell M.Sc., P.Ag., P.Geo. (Limited) Director, National Remediation Services

905.363.1407

rtossell@pinchin.com



April 8, 2016 Pinchin File: 113201.002

FINAL

EXECUTIVE SUMMARY

Pinchin Ltd. (Pinchin) was retained by Robert Blacklock of Crombie REIT (Client) to conduct a Geo-Environmental Investigation of the property located at 2441 Lakeshore Road West in Oakville, Ontario (hereafter referred to as the Site).

The Site is approximately 2.42 hectares in size, and is developed with the Bronte Village Mall.

A Record of Site Condition (RSC) completed in accordance with Ontario Regulation 153/04 (as amended) was filed with, and acknowledged by, the Ontario Ministry of the Environment and Climate Change (MOECC) for the Site by others in 2013 in support of changing the future land use from commercial to residential.

The Geo-Environmental Investigation was requested by the Client as part of the due diligence requirements prior to the potential acquisition and redevelopment of the Site. The objectives of the investigation were as follows:

- Verify soil and/or groundwater conditions at the Site in relation to the following areas of potential environmental concern (APECs), as noted in the RSC document:
 - The southern portion of the Site where re-grading and in-filling has occurred;
 - The eastern corner of the Site in the vicinity of a historical, off-Site spill;
 - The southern Site boundary in the vicinity of an active Pioneer Petroleum Gas Bar; and
 - The southern Site boundary in the vicinity of a dry-cleaning facility located across
 Lakeshore Road West.
- Collect information on soil quality at the site in for planning purposes related to future excess soil management associated with the proposed Site redevelopment; and
- Provide a preliminary evaluation of the geotechnical suitability of the soils for the proposed Site redevelopment, along with preliminary site preparation and design recommendations.

The Geo-Environmental Investigation was completed at the Site by Pinchin and Toronto Inspection Ltd. (TIL), who were under contract to Pinchin for the geotechnical component, between March 17 and March 22, 2016, and consisted of the advancement of five geotechnical boreholes, one of which was completed as an observation well.

Details and results pertaining to the geotechnical component of the investigation are provided in a separate report prepared by TIL, which has been appended to this report.



April 8, 2016 Pinchin File: 113201.002 FINAL

As part of the environmental component, select soil samples collected during the borehole drilling program were submitted for laboratory analysis of petroleum hydrocarbons (PHCs) in the F1 to F4 fraction ranges (F1-F4), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and/or inorganics. Groundwater samples collected from five monitoring wells previously installed by others were submitted for laboratory analysis of PHCs (F1-F4), VOCs, PAHs, and/or inorganics.

Based on Site-specific information, the soil and groundwater quality was assessed based on the MOECC *Table 3 Standards* for both industrial/commercial/community (ICC) and residential/parkland/institutional (RPI) land uses, and medium/fine-textured soil. The soil quality was also assessed based on the *Table 1 Standards* (background) for RPI/ICC land uses in order to provide preliminary information in relation to excess soil management/disposal during future Site redevelopment.

The reported concentrations of PHCs (F1-F4), VOCs, PAHs, and inorganics in the soil samples submitted for analysis met the *Table 1 Standards* and/or the *Table 3 Standards*, with the following exceptions:

Table 3 Standards – for ICC Land Uses

- Electrical Conductivity (EC) soil samples collected from boreholes BH1, BH4, and BH5 at depths ranging from 0.3 metres below ground surface (mbgs) to 2.0 mbgs.
- Sodium Adsorption Ratio (SAR) soil samples collected from boreholes BH4 and BH5 at depths ranging from 0.3 to 2.1 mbgs.

Table 3 Standards – for RPI Land Uses

- EC soil samples collected from boreholes BH1, BH2, BH3, BH4, and BH5 at depths ranging from 0.3 to 3.5 mbgs; and
- SAR soil samples collected from boreholes BH3, BH4, and BH5 at depths ranging from
 0.3 to 2.9 mbgs.

Table 1 Standards - for RPI/ICC Land Uses

- EC soil samples collected from boreholes BH1, BH2, BH3, BH4, and BH5 at depths ranging from 0.3 to 3.5 mbgs; and
- SAR soil samples collected from boreholes BH1, BH2, BH3, BH4, and BH5 at depths ranging from 0.3 to 2.9 mbgs.

The reported concentrations in the groundwater samples submitted for analysis of PHCs (F1-F4), VOCs, PAHs, and inorganics met the *Table 3 Standards*, with the exception of PHCs (F2, F3, and F4) in the groundwater sample collected from MW12-02, and sodium and chloride in the groundwater sample collected from monitoring well MW12-04.



April 8, 2016 Pinchin File: 113201.002

FINAL

Based on the findings of this Geo-Environmental Investigation, it is Pinchin's opinion that no further subsurface investigation is required for the Site at this time in relation APECs identified in the RSC or the overall objectives of the program.

However, given the PHC impacts identified in MW12-02, and the fact that the Site is adjacent to an active retail fuel outlet (RFO), Pinchin recommends that the monitoring wells located in the vicinity of the RFO be sampled for PHCs on an annual basis to assess PHC concentrations trends with time.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.

