Via E-mail: denis@henryinvestments.ca

September 4, 2020

Our File Ref: 190227

Alexander Fleck House Inc.
250 Rue Ste-Anne
Ottawa, Ontario K1L 7C4

Attention: Mr. Denis Michaud

Subject: Remedial Action Plan
593 Laurier Avenue West, Ottawa, Ontario

Dear Mr. Michaud,

LRL Associates Ltd. (LRL) has prepared the following Remediation Action Plan (RAP) for the metals impacted soil identified at 593 Laurier Avenue West in Ottawa, Ontario (herein referred to as the "Site").

This RAP has been prepared with consideration to the following reports that have been provided for review:

- LRL, Phase I Environmental Site Assessment, 593 Laurier Avenue West, Ottawa, Ontario. July 15, 2019, revised September 4, 2020;
- LRL, Phase II Environmental Site Assessment, 593 Laurier Avenue West, Ottawa, Ontario. November 7, 2019, revised September 4, 2020; and
- LRL, Contamination Delineation, 593 Laurier Avenue West, Ottawa, Ontario. November 8, 2019.

Based on the findings of the above referenced documents, various metals (barium, cadmium, lead, mercury and zinc) were detected above the applicable Table 7 site condition standards (SCS) in the overburden soils. The soil impacted with barium, cadmium and zinc was found to be localized to the vicinity of BH19-2, located north of the Site building, while soil impacted with lead and mercury are inferred to extend horizontally over the majority of the Site. The vertical extent of soil impacts is inferred to be from surface to bedrock, encountered at depths between 0.5 m and 1.65 m bgs. The soil remediation program is summarized below.

Chloroform was detected above the Table 7 SCS in the groundwater samples collected from both monitoring wells (MW19-1 and MW19-2) on October 17, 2020. It was anticipated that the chloroform detected is due to the use of chlorinated municipal water used during coring. Additional groundwater samples were collected from both monitoring wells on August 4, 2020 to confirm the chloroform exceedances. The results of the additional samples were below the applicable SCS

for the tested parameters, petroleum hydrocarbon compounds (PHC) and volatile organic compounds (VOC). This suggests that the initial chloroform detected was a result of the municipal water used in coring. Therefore, no groundwater impacts of the tested parameters were identified.

The scope of work to address the impacted materials is included as part of this RAP.

Task	Description	Week/Anticipated Dates of completion
1	Preparation: 1 Submit underground locate requests to public and private locators to mark out public and private utilities.	Week 1 through 4
2	Remediation Activities and Confirmatory Sampling: 1 The soil remediation activities will include the following: i. Retain a competent excavating contractor to excavate the extents of the impacted soils using best suited equipment; ii. Retain a licensed hauler to transport the impacted soils to an Ontario Ministry of the Environment, Conservation and Parks (MECP) licenced landfill or soil recycling facility; iii. Prior to the landfill acceptance, additional laboratory analysis may be required in accordance to the Waste Classification Protocols outlined in O. Reg. 558/00 Toxicity Classification Leaching Procedure (TCLP); iv. For each truck load of impacted material leaving the Site, a completed waste profile sheet will be completed and provided to the driver; and v. Care will be taken to ensure the material leaving the Site is suitable to be transported (i.e. not overly saturated) and does not contain significant amounts of debris or stone which may alter the landfill or recycling process. 2 Remove interior partitioning fencing separating front and back yards; 3 The soil will be stripped to the bedrock surface, estimated as 0.5 to 1.65 m below ground surface (bgs) while maintaining setbacks from the retaining walls, building foundations, property limits, utilities, trees; 4 Concrete, asphalt and other materials other than soil, will be segregated from the impacted soils and disposed of accordingly; 5 Once all accessible soil is removed, verification soil samples will be collected in a grid pattern from the walls and floor (where applicable);	Week 5 through 8

	6 Screen soil samples for combustible soil vapours using a combustible gas detector, as well as for visual and olfactory evidence of contamination in order to identify worst-case soil samples; 7 Select soil samples based on field observations and CSV readings collected. The number of samples submitted for laboratory analysis will be in accordance with Table 3: Minimum Confirmation Sampling Requirements for Excavation in Schedule E of MECP's "Ontario Regulation 153/04: Records of Site Condition – Part XV.1 of the Act, made under the Environmental Protection Act"; 8 Submit selected soil samples for chemical analyses of metals; and 9 Where confirmatory sample results are reported above the applicable site condition standards additional structural/geotechnical investigations may be required to facilitate removal of inaccessible material.	
3	Final Backfill and Grading 1 Upon completion of the excavating activities, the excavation will be backfilled and graded to the existing surface grade, using clean, suitable material. 2 Confirmatory samples will be collected of the fill material to demonstrate the quality of the material.	Week 9
4	Final Report 1 Prepare a reporting letter detailing site activities and findings. 2 Provide recommendations for off-site impact delineation, should remedial activities be limited by property boundaries and setback requirements.	Week 10 - 12

Yours truly,
LRL Associates Ltd.

Matthew Whitney, P.Eng.