January 13, 2022

TIP Gladstone Limited Partnership by its General Partner
TIP Gladstone GP Inc. c/o CLV Group Developments Inc.
200-485 Bank Street
Ottawa, ON K2P 1Z2

E-mail: jennifer.morrison@clvgroup.com

Attention: Jennifer Morrison

Re: Remedial Action Plan
949, 949A, 949B, 951, 951A,953, 955B, 957C and 971 Gladstone Avenue and 145 and 155 Loretta Avenue North, Ottawa, Ontario
Pinchin File: 285722.003

Further to your Request, Pinchin Ltd. (Pinchin) is pleased to provide TIP Gladstone Limited Partnership by its General Partner TIP Gladstone GP Inc. c/o CLV Group Developments Inc. (Client) with the following proposal to complete a Remedial Action Plan (RAP) for above-noted property (Site).

The Phase Two Property is approximately 1.1 hectares (2.6 acre) in size and is located on the northeast corner of the intersection of Gladstone Avenue and Loretta Avenue North in Ottawa, Ontario. The Phase Two Property is occupied by a multi-level commercial building (951 Gladstone Avenue) (Site Building A) and a three-storey commercial building equipped with one level of underground parking (145 Loretta Avenue North) (Site Building B). The Site Buildings are currently utilized for multi-tenant commercial purposes.

The Phase Two ESA was conducted at the request of the Client in relation to the future redevelopment of the Phase Two Property from commercial to mixed residential/commercial land use. A Record of Site Condition (RSC) submittal to the Ontario Ministry of Environment, Conservation and Parks (MECP) is a mandatory requirement when a land use changes to a more sensitive land use and as such, to support the RSC submission, the Phase Two ESA was conducted in accordance with the Province of Ontario's *Ontario Regulation 153/04: Records of Site Condition – Part XV.1 of the Act*, which was last amended by Ontario Regulation 274/20 on July 1, 2020 (O. Reg. 153/04).

1.0 BACKGROUND

The Phase Two ESA was completed at the Site by Pinchin consisted of the advancement of 27 boreholes, 17 of which were completed as groundwater monitoring wells.

Select "worst case" soil samples collected during the borehole drilling program were submitted for laboratory analysis of volatile organic compounds (VOCs), petroleum hydrocarbons (PHCs) fractions 1 through 4 (F1-F4), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), metals and/or inorganic parameters. Groundwater samples collected from the newly installed and one previously

installed monitoring well were submitted for laboratory analysis of VOCs, PHCs, PAHs and metals and/or inorganic parameters.

Based on Site-specific information, the soil and groundwater quality was assessed based on the Ontario Ministry of the Environment, Conservation and Parks *Table 3 Standards* for residential/parkland/ institutional land use and coarse-textured soil.

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

- Soil samples submitted for analysis from boreholes across the Phase Two Property (BH2017-1, BH2017-5, BH2017-7, BH2017-11, BH2017-13, BH2-20, BH3-20, BH4-20, BH101, BH102, BH104, BH105, BH107, BH108, BH110, BH111, BH112, BH113, BH115, BH122, BH124 and BH126) by Pinchin and others had concentrations of one or more PHC (F1-F4), VOC, PAHs, and/or metals/inorganic parameters exceeding their respective *Table 3 Standards.* The reported concentrations in the soil samples submitted for analysis of PHC (F1-F4), VOC, PAHs, PCBs and/or metals/inorganic from the remaining boreholes satisfied their respective *Table 3 Standards.*

The reported concentrations in the groundwater samples submitted for analysis of PHCs (F1-F4), VOCs, PAHs and metals and/or inorganic parameters satisfied their respective *Table 3 Standards,* with the following exceptions:

- Groundwater samples submitted for analysis from newly installed and previously installed monitoring wells across the Phase Two Property (BH2017-2, BH2017-5, BH2017-9, BH1-20, BH2-20, BH4-20, BHMW3, BHMW108, BHMW110, BHMW115, BHMW116, BHMW119, BHMW120, BHMW122 and BHMW124) by Pinchin and others had concentrations of one or more PHC (F1-F4), VOCs and chloride exceeding their respective *Table 3 Standards*. The reported concentrations in the groundwater samples submitted for analysis of PHC (F1-F4), VOC, PAHs, PCBs and/or metals/inorganic from the remaining monitoring wells satisfied their respective *Table 3 Standards.*

With respect to the identified soil and groundwater parameter exceedances summarized above, all soil and groundwater impacts have been delineated both laterally and vertically on-Site. It is Pinchin's opinion that the majority of the soil impacts will be removed during Site redevelopment, and the remaining soil and groundwater impacts will be addressed through a Tier 3 Risk Assessment before an RSC can be filed by the Qualified Person for the Phase Two Property.

2.0 SCOPE OF WORK – REMEDIAL EXCAVATION

The excavation work would be completed at the time of Site redevelopment by a contractor retained by the Client. Pinchin will supervise the removal of soil from the areas of confirmed impacts, in order to ensure that all confirmed and suspected impacts have been removed.

Upon completion of soil removal, soil samples will be collected at regular intervals during the excavation and will be screened for visual and olfactory evidence of impacts, as well as vapour concentrations. The results of the field screening will be used to select soil samples for subsequent laboratory analysis of contaminants of concern.

Following completion of the removal of the source area of soil impacts, Pinchin will revise the draft Phase Two ESA report to include a remediation appendix describing the soil remedial activities.

3.0 SCOPE OF WORK – RISK ASSESSMENT

The use of RA is a potential means of managing environmental impacts in place when remediation is not cost effective or technically practicable. An RA offers an option to derive risk-based site-specific standards that ensure the same level of protection to human health and the environment as the generic standards. This approach is considered an acceptable, if not preferred, alternative to remediation for many regulatory jurisdictions in Canada, particularly where full remediation is not practical.

An RA is a scientific evaluation of the human and/or ecological health risks associated with contaminants present on a site. Contaminants may be present simultaneously in several media such as soil, water, air, food, dust and/or consumer products. Human and ecological “receptors” may be exposed to these contaminants through multiple exposure pathways including ingestion of soil or water, inhalation of vapours and dermal contact with contaminated media. Receptor exposures are estimated, and risks quantified using established models and toxicological data. If risks are identified, site-specific standards may be generated as adjusted remedial goals, or, alternatively, mitigation may be recommended via the implementation of risk management measures (RMM). Typical RMMs include administrative controls such as limiting building or site use or prohibiting the installation of potable wells, as well as engineered controls such as physical barriers to block contact with contaminants and long-term monitoring to ensure the controls are effective over time.

Under O. Reg. 153/04, the MECP allows the submission of two different types of RAs: T2RAs, which are limited in scope and are only applicable for sites with characteristics meeting certain MECP-specified assumptions; and T3RAs, which are considered more detailed quantitative assessments of risk, and are not bound by the same generic assumptions.

The reporting framework for RAs in Ontario involves the following components:

- Problem Formulation (resulting in human health and ecological conceptual site models (CSMs));
- Exposure Assessment;
- Toxicity/Hazard Assessment;
- Risk Characterization; and
- Risk Management.

3.1.1 Tier 3 Risk Assessment

At this time, a T3RA is the only possible RA option given the nature, distribution, and concentration of contaminants across the Site.

The T3RA process under O. Reg. 153/04 involves the preparation of an RA package which is submitted to the MECP to undergo peer review. Typically, several iterations of the RA are required prior to receiving MECP acceptance. It is anticipated that at least three rounds of review and revision will take place, with the extent of revision being reduced each time.

Given that on-Site contamination has been observed near property boundaries, the current interpretation of the available data is that off-Site migration of impacts is possible. The MECP may decide during the T3RA review process to treat the Site as a “Wider Area of Abatement” (WAA), which would necessitate the preparation and execution of a public communication plan and result in a longer review timeline per RA submission (22 weeks). The preparation and execution of a public communication plan have not been included in this scope of work (should the MECP require this, Pinchin will notify the Client and propose a suitable cost and schedule under separate cover).

Submission #1 – Pre-Submission Form

The first stage of a T3RA is the Pre-Submission Form (PSF), which encompasses the problem formulation stage of the work and will include information related to the site assessment work (including the P1CSM and P2CSM), and the human health and ecological CSMs.

Prior to submission of the PSF, the Client must provide the following documents to Pinchin to support the submission:

- A copy of the deed / transfer document;
- A plan of survey (signed and sealed) that clearly delineates the boundaries of the property being assessed;
- A legal description of the property and description of ownership, prepared by a lawyer; and
- Proof of legal name of land owner (Certificate of Status, Articles of Incorporation, Corporation Profile Report, Master Business License and/or Passport, if legal entity is an individual or sole proprietor).

The first submission to the MECP (Submission #1) includes the PSF package submitted electronically.

Submission #2 – Tier 3 Risk Assessment

As part of the T3RA process, the MECP will provide review comments on the first submission, which may include issues related to regulatory interpretation, technical interpretation of data, clarity, uncertainty and differences in understanding of the site conditions. These comments on the T3RA approach will be addressed by Pinchin and incorporated into the T3RA report.

Once MECP review comments on Submission #1 have been received, preparation of the T3RA report will be undertaken. The T3RA report will include the information contained in the PSF and will be laid out consistent with O. Reg. 153/04, which outlines a mandatory table of contents and further reporting requirements for MECP submission. Any review comments received from the MECP concerning the P2CSM will be addressed concurrently, by the QP_{ESA}, with the preparation of the RA report.

The human health T3RA will make use of MECP accepted toxicological reference values, updated according to newer published assessments, as applicable. The exposure assessment will consider potential routes of exposure associated with vapour intrusion to current and future buildings or subsurface contact with impacts during potential future excavations. Vapour intrusion may be assessed using multiple lines of evidence, including measured soil and groundwater concentrations as well as the results of any indoor air quality and/or soil vapour assessment programs.

A screening level assessment of ecological risk is proposed, based on the MGRA model or similar screening level techniques. The MGRA model may also be used as an initial screening step in the human health risk assessment in order to focus the more detailed evaluation on specific compounds or areas of greatest impacts. Detailed quantitative assessments of risk will be undertaken where the screening level assessment has predicted risks for certain contaminants of concern (COCs) and exposure pathways.

Risk management will be required if unacceptable risks are identified. The risk management approach will be exposure pathway-dependent and may include measures such as vapour barriers or vapour mitigation systems for current or future buildings, soil caps to limit direct contact with soil, and/or subsurface worker health and safety plan to reduce direct contact with subsurface impacts, among other options.

Submission #3 – Revised Tier 3 Risk Assessment

The MECP will provide review comments on the T3RA report, which typically include issues related to regulatory interpretation, technical interpretation of data, clarity, uncertainty and differences in understanding of the site conditions. These comments will be addressed by Pinchin, and Revised T3RA deliverables will be submitted to MECP. Any remaining review comments received from the MECP concerning the P2CSM will be addressed concurrently, by the QP_{ESA}, with the preparation of the RA report.

Overall T3RA Submissions

The submission of a T3RA to the MECP and the lump sum costs for this project are based on the following tasks:

1. Submission #1: Completion of a PSF for MECP review and commentary.
2. Submission #2: Completion of a T3RA report, including responses to MECP Comments received on the PSF, for MECP review and commentary.
3. Submission #3: Completion of a Revised T3RA report, including responses to MECP Comments received on the T3RA (Submission #2), for MECP review and commentary.

The budget provided includes responses to MECP requests to elaborate, clarify, update or provide minor amendments to the RA report and the contaminants, receptors and pathways evaluated therein. It should also be noted that additional MECP comments may be issued following Submission #3.

Certificate of Property Use

It is likely that the MECP will issue a CPU for the Site, outlining the risk management requirements noted in the T3RA. If this is the case, a Draft CPU will be prepared by the local MECP District Engineer and then posted on the Environmental Brownfield Registry (EBR) for a 30-45 day public review and comment period. Pinchin will provide the MECP with electronic information from the RA and risk management plan for inclusion in the CPU, as applicable. Pinchin will review the technical portions of the Draft CPU for consistency with the proposed RMM and results of the RA. Separate review of the Draft CPU by the owner's legal counsel is recommended. Once the public review and comment period has elapsed, the MECP will finalize the CPU and it will be issued to the Client for registration on the land title.

Closure

If you have any questions, or require additional information, please do not hesitate to contact the undersigned.

Sincerely,

Pinchin Ltd.

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