



June 7, 2024

FINAL

Windmill Development Group
150 Elgin Street, Suite 1000
Ottawa, ON K2P 1L4

Re: **Phase One Environmental Site Assessment Update**
384 Arlington Avenue and 241 Bell Street North, Ottawa, Ontario
Pinchin File: 341532

Pinchin Ltd. (Pinchin) is pleased to provide the findings of our Phase One Environmental Site Assessment (ESA) Update to Windmill Development Group (Client) for the property described as 384 Arlington Avenue and 241 Bell Street North, Ottawa, Ontario (Phase One Property or Site).

1.0 BACKGROUND

This Phase One ESA Update has been prepared by Pinchin for the Client as an update to a Phase One ESA dated September 23, 2022 completed for the Phase One Property. The Phase One Property and Phase One Study Area are shown on Figure 2 (all figures are provided in Appendix I).

Pinchin previously prepared the following relevant reports for Client:

- *“Phase One Environmental Site Assessment, 384 Arlington Avenue and 241 Bell Street North, Ottawa, Ontario”* and dated September 23, 2022 (2022 Pinchin Phase One ESA Report).

At the time of the above-noted assessments, the Phase One Property was developed with a two-storey community building (Site Building).

Based on information obtained during the 2022 Pinchin Phase One ESA, two potentially contaminating activities (PCAs) were identified at the Phase One Property (i.e., on-Site) and 29 PCAs were identified within the Phase One Study Area outside of the Phase One Property (i.e., off-Site). Of the on and off-Site PCAs, none were considered to result in areas of potential environmental concern (APECs) at the Phase One Property given no evidence of spills or historical spills (i.e., staining) observed in the vicinity of the transformers and no issues of potential environmental concern (i.e., spills) were noted for the transformers within the Environmental Risk Information Services report and any maintenance/ environmental issues associated with the transformers would be the responsibility of Hydro Ottawa; no spills, evidence of historical spills (i.e., staining) or floor drains observed in the boiler room and vicinity of the historical on-Site aboveground storage tank (AST); the impacts of creosote or chromated copper arsenate (CCA) typically being minor, localized, and near the surface; polychlorinated biphenyls (PCBs) being highly immobile in soils and immiscible in water; the distance between these properties and the Phase One property; and the inferred groundwater flow direction. Based on these findings, nothing was



identified that is likely to have resulted in impacts to the soil and/or groundwater at the Phase One Property and would require the completion of a Phase Two ESA. As such, it is Pinchin's opinion that the Phase One Property is suitable for the purpose of filing a rezoning application with the City of Ottawa based only on the completion of this Phase One ESA report.

Pinchin conducted the 2022 Pinchin Phase One ESA Report in accordance with Part VII and Schedule D of the Province of Ontario's *Environmental Protection Act R.S.O. 1990, c. E.19* and *Ontario Regulation 153/04: Records of Site Condition – Part XV.1 of the Act*, and last amended by Ontario Regulation 274/20 on July 1, 2020 (O. Reg. 153/04). The purpose of the Phase One ESA was to assess the potential presence of environmental impacts at the Phase One Property due to activities at and near the Phase One Property.

The 2022 Pinchin Phase One ESA Report was conducted at the request of the Client as a condition for a rezoning application with the City of Ottawa.

The purposes of this Phase One ESA Update were to:

- Assess whether any new APECs or PCAs exist at the Phase One Property or Phase One Study Area;
- Provide a revised table and figures summarizing PCAs identified in the Phase One Study Area; and
- Provide a revised Phase One Conceptual Site Model (Phase One CSM) following further consideration of potential exposure pathways and ecological receptors.

The Phase One ESA Update constitute the Phase One ESA reporting requirements necessary to support a rezoning application for the Site in accordance with O. Reg. 153/04. An update must be prepared if a Phase One ESA report is more than 18 months old prior to filing a rezoning application.

2.0 SCOPE OF WORK

The scope of work for this Update Phase One ESA was consistent with O. Reg. 153/04 in support of the Client's rezoning application and was comprised of a Site reconnaissance. The Site reconnaissance comprised of a visual assessment of the Phase One Property and the surrounding properties within the Phase One Study Area (from publicly-accessible areas) including any associated buildings and/or facilities for the purpose of identifying the presence of potentially contaminating activities (PCAs).

Furthermore, Pinchin conducted an interview with the current Site owner to determine if any current or historical operations have caused a concern with respect to the environmental condition of the Phase One Property and the surrounding properties within the Phase One Study Area.



2.1 Written Description of Investigation

2.2.1 Summary of Site Reconnaissance

Pinchin formerly completed a Site inspection and a review of surrounding properties within the Phase One Study Area from publicly accessible locations on August 31, 2022 as part of the original Phase One ESA. The initial Site reconnaissance was completed by Pinchin personnel, under the supervision of Pinchin's Qualified Person (QP) overseeing this project. The Phase One Study Area is outlined on Figure 3.

As part of this Update Phase One ESA, Mr. Alex Kelly of Pinchin completed an additional Site reconnaissance on May 27, 2024 under supervision of Pinchin's QP for this project. The Site reconnaissance was documented with notes and photographs. Photographs of some of the features noted during the Site reconnaissance are attached in Appendix II.

The results of the subsequent Site reconnaissance indicated that no substantial changes have been observed to have occurred on the Phase One Property or on the surrounding properties located within the Phase One Study Area from the time of the initial Site reconnaissance that would result in potential subsurface impacts at the Phase One Property. As such, no additional PCAs or APECs, beyond the PCAs identified in the initial Phase One ESA, have been identified.

3.0 REVIEW AND EVALUATION OF INFORMATION

3.1 First Developed Use Determination

The first developed land use of the Phase One Property is defined by O. Reg. 153/04 to be the earlier of:

- The first use of a Phase One Property in or after 1875 that resulted in the development of a building or structure on the property; and
- The first potentially contaminating use or activity on the Phase One Property.

A review of the aerial photographs, Fire Insurance Plans (FIPs), an interview with the Site Representative and an exterior plaque observed during the Site reconnaissance, determined that the original portion of the Site Building was constructed in approximately the early 1900's, with an addition constructed along the northwest elevation of the original portion of the Site Building in approximately 1910. In the 1928 aerial photograph and 1922 FIP reviewed by Pinchin, a building that was similar in size and configuration to the present-day Site Building was evident on the Phase One Property. Therefore, it is Pinchin's opinion that the first developed use of the Phase One Property was in the early 1900's.

The Site Building is currently occupied by the Ottawa Korean Community Church as a church. The FIPs for the Phase One Property indicated that the Site Building was historically occupied by Bell Street



Methodist Church in 1915 and 1922, and Bell Street United Church in 1948 and 1963. Therefore, the Site Building has historically been occupied as a church.

The date of the first developed use of the Phase One Property was determined through a review of FIPs, aerial photographs, an exterior plaque and information from the Site Representative. No other information was reviewed by Pinchin during the records review, or obtained during the Site reconnaissance or interviews which would have resulted in a different interpretation of the date of first developed use of the Phase One Property.

3.2 Potentially Contaminating Activities

3.2.1 On-Site PCAs

Pinchin's investigation of the Phase One Property during the previous Phase One ESA identified the following on-Site PCAs that were considered to represent APECs at the Phase One Property:

- PCA-1: Item 28: Gasoline and Associated Products Storage in Fixed Tanks – fill/vent pipes indicative of an AST were observed within the boiler room and exterior to the west elevation of the Site Building during Pinchin's Site reconnaissance. In addition, equipment observed within the boiler room indicated that an oil-fired boiler system was formerly present within the Site Building; and
- PCA-2: Item 55: Transformer Manufacturing, Processing and Use – a pole-mounted oil-cooled transformer is located adjacent to the north elevation of the Site Building.

No substantive changes were observed to have been made to the Phase One Property from the time of the initial Site reconnaissance that would result in potential subsurface impacts and, as such, no additional on-Site PCAs have been identified as part of this Update Phase One ESA.

The locations of the on-Site PCAs are shown on Figure 3.

3.2.2 Off-Site PCAs

29 PCAs were identified within the Phase One Study Area outside of the Phase One Property (i.e., off-Site). Of the off-Site PCAs, none were considered to result in APECs at the Phase One Property:

- PCA-3: Item 46: Rail Yards, Tracks and Spurs – the Canada Atlantic Railway was located approximately 30 m south of the Phase One Property in the 1895-1948 FIPs. In addition, a former railyard presumably associated with the Canadian Atlantic Railway was located approximately 80 m south of the Phase One Property in the 1895-1948 FIPs;
- PCA-4: Item 37: Operation of Dry Cleaning Equipment (where chemicals are used) – Trans Dry Cleaning was listed at 219 Bell Street North in the 2000 city directory;



- PCA-5: Other – the property located at 10 Orangeville Street was identified within the National PCB Inventory database search results. This property was identified as having stored PCBs or PCB-containing equipment (including transformers, capacitors, ballasts, soil and free liquids);
- PCA-6: Item 10: Commercial Autobody Shops – White Truck Sale Ottawa Ltd. and an automotive repair/servicing facility were located at 520 Bronson Avenue in the 1948 and 1963 FIPs;
- PCA-7: Other – the property located at 555 Booth Street was identified within the National PCB Inventory database search results. This property was identified as having stored PCBs or PCB-containing equipment (including transformers, capacitors, ballasts, soil and free liquids);
- PCA-8: Item 10: Commercial Autobody Shops – Green’s Garage and Holliday Auto (i.e., automotive repair/servicing facilities);
- PCA-9: Other – the property located at 605 Bronson Avenue was identified within the National PCB Inventory database search results and within the Ontario Inventory of PCB Storage Sites database. This property was identified as having stored PCBs or PCB-containing equipment (including transformers, capacitors, ballasts, soil and free liquids) within the Phase One Study Area; however, PCBs are highly immobile in soils and immiscible in water. Item 28: Gasoline and Associated Products Storage in Fixed Tanks – the property located at 275 Chamberlain Avenue was identified within the chemical or fuel storage tank databases search results. This property was listed in these databases as an institutional building with associated underground storage tanks (USTs)). It should be noted that 605 Bronson Avenue and 275 Chamberlain Avenue are the same property;
- PCA-10: Item 28: Gasoline and Associated Products Storage in Fixed Tanks – the property located at 470 Bronson Avenue was identified within the chemical or fuel storage tank databases search results. This property was listed in these databases as an RFO with associated USTs; and
- PCAs-11-31: Item 55: Transformer Manufacturing, Processing and Use – a total of 36 pole-mounted oil-cooled transformers are located within 250 m of the Phase One Property.

No substantive changes were observed to have been made to the Phase One Study Area from the time of the initial Site reconnaissance that would result in potential subsurface impacts and, as such, no additional on-Site PCAs have been identified as part of this Update Phase One ESA.

The locations of the off-Site PCAs are shown on Figure 3.



3.3 Areas of Potential Environmental Concern

No APECs as defined by O. Reg. 153/04 were identified by Pinchin at the Phase One Property.

3.4 Updated Phase One Conceptual Site Model

A conceptual site model (CSM) was created to provide a summary of the findings of the Update Phase One ESA. The Phase One CSM is summarized in Figures 1 through 3, which illustrate the following features within the Phase One Study Area, where present:

- Existing buildings and structures;
- Water bodies located in whole or in part within the Phase One Study Area;
- Areas of natural significance located in whole or in part within the Phase One Study Area;
- Drinking water wells located at the Phase One Property;
- Land use of adjacent properties;
- Roads within the Phase One Study Area;
- PCAs within the Phase One Study Area, including the locations of tanks; and
- APECs at the Phase One Property.

The following provides a narrative summary of the Updated Phase One CSM:

- The Phase One Property consists of one legal lot situated at the municipal addresses of 384 Arlington Avenue and 241 Bell Street North, Ottawa, Ontario, which is currently owned by The Ottawa Korean Community Church. The Phase One Property is located immediately south of Arlington Avenue, approximately 50 metres (m) southwest of the intersection of Arlington Avenue and Cambridge Street North in Ottawa, Ontario. The Phase One Property is presently developed with a two-storey community building (Site Building). There is no record of industrial use or of a commercial use (e.g., garage, bulk liquid dispensing facility or dry cleaner) that would require classifying the Phase One Property as an enhanced investigation property;
- The nearest surface water body is the Ottawa River located approximately 1.5 kilometres northwest of the Phase One Property at an elevation of approximately 53 m above mean sea level;
- No areas of natural significance were identified within the Phase One Study Area;
- No drinking water wells were located on the Phase One Property;



- The adjacent and surrounding properties in the vicinity of the Site consist of commercial and residential land uses. The properties located north of the Phase One Property consist of residential dwellings, multi-tenant residential buildings and associated roadways; the properties located east of the Phase One Property consist of multi-tenant residential buildings, residential dwellings, commercial buildings and associated roadways; the properties located south of the Phase One Property consist of residential dwellings and associated roadways to beyond 200 m from the Phase One Property; and the properties located west of the Phase One Property consist of multi-tenant residential buildings, an automotive repair/servicing facility and associated roadways to beyond 200 m from the Phase One Property;
- Two PCAs were identified at the Phase One Property (i.e., a former on-Site heating oil AST; and one pole-mounted oil-cooled transformer located adjacent to the north elevation of the Site Building). 29 PCAs were identified within the Phase One Study Area:
 - A former railway line located approximately 30 m south of the Phase One Property and a former railyard located approximately 80 m south of the Phase One Property in the 1895-1948 FIPs;
 - A dry-cleaning facility located approximately 45 m north of the Phase One Property in the 2000 city directory;
 - Three properties identified in the PCB inventory database search located approximately 100 m southwest, 150 m southwest and 200 m southeast of the Phase One Property, respectively;
 - A former automotive repair/servicing facility located approximately 120 m northeast of the Phase One Property in the 1948 and 1963 FIPs;
 - An active automotive repair/servicing facility located approximately 150 m west of the Phase One Property since approximately 1966;
 - Two properties identified in the chemical or fuel storage tank databases search results as having USTs, located approximately 200 m southeast and 200 m northeast of the Phase One property, respectively; and
 - A total of 36 pole-mounted oil-cooled transformers located within 250 m of the Phase One Property.

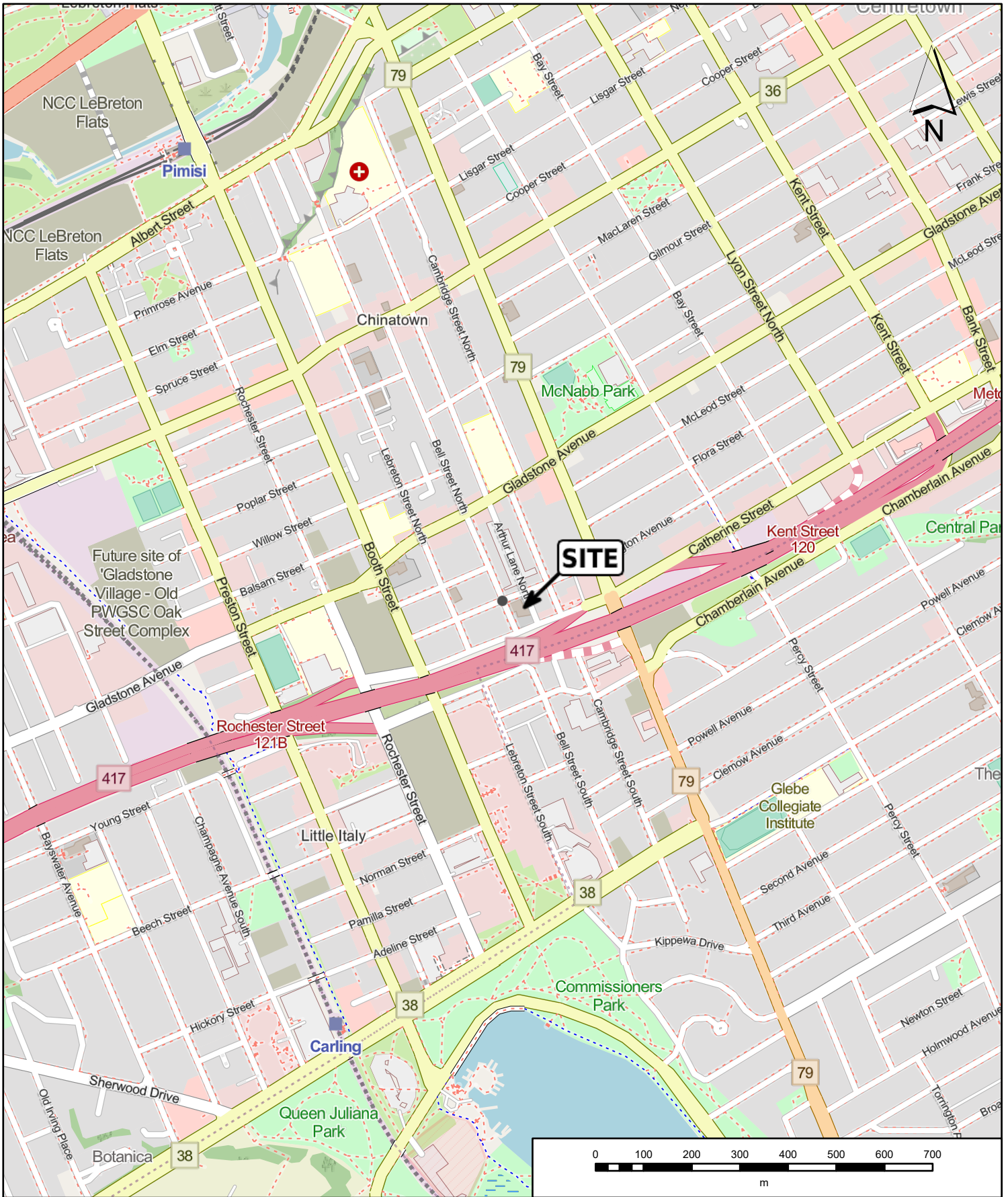



However, no evidence of spills or historical spills (i.e., staining) observed in the vicinity of the transformers and no issues of potential environmental concern (i.e., spills) were noted for the transformers within the ERIS report and any maintenance/environmental issues associated with the transformers would be the responsibility of Hydro Ottawa. Based on the above-noted information, as well as no spills, evidence of historical spills (i.e., staining) or floor drains observed in the boiler room and vicinity of the historical on-Site AST; the impacts of creosote or CCA typically being minor, localized, and near the surface; PCBs being highly immobile in soils and immiscible in water; the distance between these properties and the Phase One property; and the inferred groundwater flow direction, it is Pinchin's opinion that these PCAs do not represent areas of potential environmental concern for the Phase One Property. Based on these findings, nothing was identified that is likely to have resulted in impacts to the soil and/or groundwater at the Phase One Property and would require the completion of a Phase Two ESA. As such, it is Pinchin's opinion that the Phase One Property is suitable for the purpose of filing a rezoning application with the City of Ottawa based only on the completion of this Phase One ESA report;

- Underground utilities at the Phase One Property provide potable water, natural gas, electrical, telephone, cable and sewer services to the Site Building. These services enter the Site Building through subsurface conduits, with the exception of a pressurized natural gas line, which connects to meters located along the exterior of the Site Building;
- The Phase One Property and the surrounding properties located within the Phase One Study Area are located within alluvial deposits consisting of stratified gravel, sand, silt and clay. Bedrock is expected to consist of sedimentary rocks consisting of limestone, dolomite, shale, argillite, sandstone, quartzite, and/or grit; and
- The Phase One Property is relatively flat. Local groundwater flow is inferred to be to the northwest, based on the nearest surface water body.

There were no deviations from the Phase One ESA requirements specified in O. Reg. 153/04 or absence of information that have resulted in uncertainty that would affect the validity of the Phase One CSM.

APPENDIX I
Figures



	PROJECT NAME: PHASE ONE ENVIRONMENTAL SITE ASSESSMENT UPDATE					FIGURE NUMBER 1
	CLIENT NAME: WINDMILL DEVELOPMENT GROUP					
	PROJECT LOCATION: 384 ARLINGTON AVENUE AND 241 BELL STREET NORTH, OTTAWA, ONTARIO					
	FIGURE NAME: KEY MAP					
PROJECT NUMBER: 341532	SCALE: 1:15,000	DRAWN BY: NJ	REVIEWED BY: AK	DATE: JUNE 2024		

APPENDIX II
Photographs



Photo 3 – Site Building (southeast elevation).



Photo 4 – Site Building (southwest elevation).



Photo 5 – Property located northwest of the Site.



Photo 6 – Property located northeast of the Site.



Photo 7 – Property located southeast of the Site.



Photo 8 – Property located southwest of the Site.