Request ID: 023669340
Demande n° :
Transaction ID: 73264447
Transaction n° :
Category ID: CT
Catégorie :

Province of Ontario
Province de l'Ontario
Ministry of Government Services
Ministère des Services gouvernementaux

Date Report Produced: 2019/10/04
Document produit le :
Time Report Produced: 10:48:57
Imprimé à :

CERTIFICATE OF STATUS
ATTESTATION DU STATUT JURIDIQUE

This is to certify that according to the records of the Ministry of Government Services

D'après les dossiers du Ministère des Services gouvernementaux, nous attestons que la société

OTTAWA COMMUNITY HOUSING CORPORATION/ LA SOCIETE DE LOGEMENT COMMUNAUTAIRE D'OTTAWA

Ontario Corporation Number

Numéro matricule de la société (Ontario)

0020000538

is a corporation incorporated, amalgamated or continued under the laws of the Province of Ontario.

est une société constituée, prorogée ou née d'une fusion aux termes des lois de la Province de l'Ontario.

The corporation came into existence on

La société a été fondée le

DECEMBER 14 DÉCEMBRE, 2000

and has not been dissolved.

et n'est pas dissoute.

Dated

Fait le

OCTOBER 04 OCTOBRE, 2019

Barbara Hackett

Director
Directeur

The issuance of this certifcate in electronic form is authorized by the Ministry of Government Services.

La délivrance du présent certificat sous forme électronique est autorisée par le Ministère des Services gouvernementaux.

nelligan | o'brien | payne

J. Brian Hebert, Tel: (613) 231-8313, Fax: (613) 364-4161, brian.hebert@nelligan.ca

June 27, 2018

Ottawa Community Housing Corporation
39 Auriga Drive
Ottawa, Ontario
K2E 7Y8

Attn: Mr. Robert MacNeil

Re: ***Ottawa Community Housing Corporation***
RSC Lands Assessment Roll Number: 06 14 063 501 16102-0000
RSC Lands Property Identifier Number: 04107-0288
Municipal Address: 933 Gladstone Avenue, Ottawa, Ontario

We are the solicitors authorized to practice law in the Province of Ontario representing Ottawa Community Housing Corporation. After reviewing a current plan of survey of the property that was prepared, signed and sealed by a surveyor and all other necessary documents, we certify that Ottawa Community Housing Corporation is the sole owner in fee simple of all land comprised within PIN 04107-0288 and described as follows:

Please see Schedule "A" attached.

We trust that this is satisfactory for your purposes. Should you have any questions or comments, or require anything further, please do not hesitate to call.

Yours truly,

J. Brian Hebert
(613) 231-8313

P.S. Please note that the above noted Assessment Roll Number also includes lands comprised within PIN 04107-0032 which are owned by Ottawa Community Housing Corporation, but do not form part of the RSC Lands.

SCHEDULE A

FIRSTLY:

LOTS 1,2,3,4&5 BLOCK B NORTH LAUREL STREET
LOTS 1,2,3,4&5 BLOCK B SOUTH OAK STREET
PART OF LAUREL STREET (CLOSED BY JUDGE'S ORDER PER INST. NO. CR574103)
PART OF OAK STREET (CLOSED BY JUDGE'S ORDER PER INST. NO. OC574103), ALL ON REGISTERED PLAN 73, BEING PART 1 ON PLAN 4R-31143

SECONDLY:

PART OF LAUREL STREET (CLOSED BY JUDGE'S ORDER PER INST. NO. CR574103), ON REGISTERED PLAN 73 BEING PART 2 ON PLAN 4R-31143

THIRDLY:

LOTS 1, 2 & PART OF LOT 3 BLOCK C SOUTH WALNUT STREET
LOTS 1,2,3&4 BLOCK C NORTH WALNUT STREET
LOTS 1,2,3,4 AND PART OF LOT 5 BLOCK C SOUTH LARCH STREET
LOTS 1,2,3,4 AND PART OF LOT 5 BLOCK C NORTH LARCH STREET
LOTS 1,2,3,4&5 BLOCK C SOUTH LAUREL STREET
PART OF WALNUT STREET (CLOSED BY JUDGE'S ORDER, INST. NO. CR179807)
PART OF LARCH STREET (CLOSED BY JUDGE'S ORDER, INST. NO. CR574103), ALL ON REGRISTERED PLAN 73, BEING PART 3 ON PLAN 4R-31143

Properties

PIN 04107 - 0288 LT *Interest/Estate* Fee Simple

Description PART OF OAK STREET, PLAN 73, CLOSED BY CR574103; LOTS 1 TO 5, BLOCK B, PLAN 73, SOUTH OF OAK STREET; LOTS 1 TO 5, BLOCK B, PLAN 73, NORTH OF LAUREL STREET, DESIGNATED AS PART 11 ON PLAN 4R28806; PART OF LAUREL STREET, PLAN 73, CLOSED BY CR574103; LOTS 1 TO 5, BLOCK C, PLAN 73, SOUTH OF LAUREL STREET; LOTS 1 TO 4 AND PART OF LOT 5, BLOCK C, PLAN 73, NORTH OF LARCH STREET; PART OF LARCH STREET, PLAN 73, CLOSED BY CR574103; LOTS 2, 3 AND 4 AND PART OF LOTS 1 AND 5, BLOCK C, PLAN 73, SOUTH OF LARCH STREET; LOTS 2 AND 3 AND PART OF LOTS 1 AND 4, BLOCK C, PLAN 73, NORTH OF WALNUT STREET; PART OF WALNUT STREET, PLAN 73, CLOSED BY CR179807; LOT 2 AND PART OF LOTS 1 AND 3, BLOCK C, PLAN 73, SOUTH OF WALNUT STREET; PART OF LOTS 1, 2 AND 3, BLOCK C, PLAN 73, NORTH OF GLADSTONE AVENUE; DESIGNATED AS PARTS 11 TO 19 (INCLUSIVE) ON PLAN 5R4993; SUBJECT TO AN EASEMENT OVER PART OF LAUREL STREET, PLAN 73, CLOSED BY CR574103 DESIGNATED AS PART 3 ON PLAN 4R28807 IN FAVOUR OF THE CITY OF OTTAWA AS IN CR607830; CITY OF OTTAWA

Address OTTAWA

PIN 04107 - 0032 LT *Interest/Estate* Fee Simple

Description PT LT 8, BLK B, PL 73 , PT LT 9, BLK B, PL 73 , PT LT 10, BLK B, PL 73 , W/S CHAMPAGNE AV, PTS 8, 9 & 10, 5R4993 ; OTTAWA/NEPEAN

Address OTTAWA

Consideration

Consideration $ 7,000,000.00

Transferor(s)

The transferor(s) hereby transfers the land to the transferee(s).

Name CANADA LANDS COMPANY CLC LIMITED

Address for Service 1 University Avenue
Suite 1200
Toronto, ON M5J 2P1
Attention: Executive V.P., Real Estate
Attention: General Counsel & Corporate Secretary

I, John W. McBain and I, Matthew Tapscott, have the authority to bind the corporation.

This document is not authorized under Power of Attorney by this party.

Transferee(s) *Capacity* *Share*

Name OTTAWA COMMUNITY HOUSING CORPORATION

Address for Service 39 Auriga Drive
Ottawa, ON K2E 7Y8

Signed By

Caleigh Rebecca Caplan	333 Bay Street, Suite 2400, Bay Adelaide Centre Toronto M5H 2T6	acting for Transferor(s)	Signed	2017 05 11

Tel 416-366-8381

Fax 416-364-7813

I am the solicitor for the transferor(s) and I am not one and the same as the solicitor for the transferee(s).

I have the authority to sign and register the document on behalf of the Transferor(s).

Signed By

Michael Charles David Beaulne	1500-50 O'Connor Ottawa K1P 6L2	acting for Transferee(s)	Signed	2017 05 11

Tel 613-238-8080

Fax 613-238-2098

I am the solicitor for the transferee(s) and I am not one and the same as the solicitor for the transferor(s).

I have the authority to sign and register the document on behalf of the Transferee(s).

Submitted By

NELLIGAN O'BRIEN PAYNE LLP	1500-50 O'Connor Ottawa K1P 6L2	2017 05 11

Tel 613-238-8080

Fax 613-238-2098

Fees/Taxes/Payment

Statutory Registration Fee	$63.35
Provincial Land Transfer Tax	$136,475.00
Total Paid	$136,538.35

File Number

Transferee Client File Number : 29632-97

LAND TRANSFER TAX STATEMENTS

In the matter of the conveyance of: 04107 - 0288 PART OF OAK STREET, PLAN 73, CLOSED BY CR574103; LOTS 1 TO 5, BLOCK B, PLAN 73, SOUTH OF OAK STREET; LOTS 1 TO 5, BLOCK B, PLAN 73, NORTH OF LAUREL STREET, DESIGNATED AS PART 11 ON PLAN 4R28806; PART OF LAUREL STREET, PLAN 73, CLOSED BY CR574103; LOTS 1 TO 5, BLOCK C, PLAN 73, SOUTH OF LAUREL STREET; LOTS 1 TO 4 AND PART OF LOT 5, BLOCK C, PLAN 73, NORTH OF LARCH STREET; PART OF LARCH STREET, PLAN 73, CLOSED BY CR574103; LOTS 2, 3 AND 4 AND PART OF LOTS 1 AND 5, BLOCK C, PLAN 73, SOUTH OF LARCH STREET; LOTS 2 AND 3 AND PART OF LOTS 1 AND 4, BLOCK C, PLAN 73, NORTH OF WALNUT STREET; PART OF WALNUT STREET, PLAN 73, CLOSED BY CR179807; LOT 2 AND PART OF LOTS 1 AND 3, BLOCK C, PLAN 73, SOUTH OF WALNUT STREET; PART OF LOTS 1, 2 AND 3, BLOCK C, PLAN 73, NORTH OF GLADSTONE AVENUE; DESIGNATED AS PARTS 11 TO 19 (INCLUSIVE) ON PLAN 5R4993; SUBJECT TO AN EASEMENT OVER PART OF LAUREL STREET, PLAN 73, CLOSED BY CR574103 DESIGNATED AS PART 3 ON PLAN 4R28807 IN FAVOUR OF THE CITY OF OTTAWA AS IN CR607830; CITY OF OTTAWA

04107 - 0032 PT LT 8, BLK B, PL 73 , PT LT 9, BLK B, PL 73 , PT LT 10, BLK B, PL 73 , W/S CHAMPAGNE AV, PTS 8, 9 & 10, 5R4993 ; OTTAWA/NEPEAN

BY: CANADA LANDS COMPANY CLC LIMITED

TO: OTTAWA COMMUNITY HOUSING CORPORATION %(all PINs)

1. STEPHANE GIGUERE

I am

- ☐ (a) A person in trust for whom the land conveyed in the above-described conveyance is being conveyed;
- ☐ (b) A trustee named in the above-described conveyance to whom the land is being conveyed;
- ☐ (c) A transferee named in the above-described conveyance;
- ☐ (d) The authorized agent or solicitor acting in this transaction for ____ described in paragraph(s) (_) above.
- ☑ (e) The President, Vice-President, Manager, Secretary, Director, or Treasurer authorized to act for OTTAWA COMMUNITY HOUSING CORPORATION described in paragraph(s) (c) above.
- ☐ (f) A transferee described in paragraph ( ) and am making these statements on my own behalf and on behalf of _____ who is my spouse described in paragraph (_) and as such, I have personal knowledge of the facts herein deposed to.

2. I have read and considered the definition of "single family residence" set out in subsection 1(1) of the Act. The land being conveyed herein:

does not contain a single family residence or contains more than two single family residences.

3. **The total consideration for this transaction is allocated as follows:**

(a) Monies paid or to be paid in cash		7,000,000.00
(b) Mortgages	(i) assumed (show principal and interest to be credited against purchase price)	0.00
	(ii) Given Back to Vendor	0.00
(c) Property transferred in exchange (detail below)		0.00
(d) Fair market value of the land(s)		0.00
(e) Liens, legacies, annuities and maintenance charges to which transfer is subject		0.00
(f) Other valuable consideration subject to land transfer tax (detail below)		0.00
(g) Value of land, building, fixtures and goodwill subject to land transfer tax (total of (a) to (f))		7,000,000.00
(h) VALUE OF ALL CHATTELS - items of tangible personal property		0.00
(i) Other considerations for transaction not included in (g) or (h) above		0.00
(j) Total consideration		7,000,000.00

6. Other remarks and explanations, if necessary.

1. The information prescribed for purposes of section 5.0.1 of the Land Transfer Tax Act is not required to be provided for this conveyance.

2. Other remarks & explanations: The Non-Resident Speculation Tax does not apply to this transfer because the lands are not residential lands wihtin the Greater Golden Horseshoe area.

PROPERTY Information Record

A. Nature of Instrument: Transfer

LRO 4 Registration No. OC1887438 Date: 2017/05/11

B. Property(s): PIN 04107 - 0288 Address OTTAWA Assessment Roll No -

PIN 04107 - 0032 Address OTTAWA Assessment Roll No -

C. Address for Service: 39 Auriga Drive
Ottawa, ON K2E 7Y8

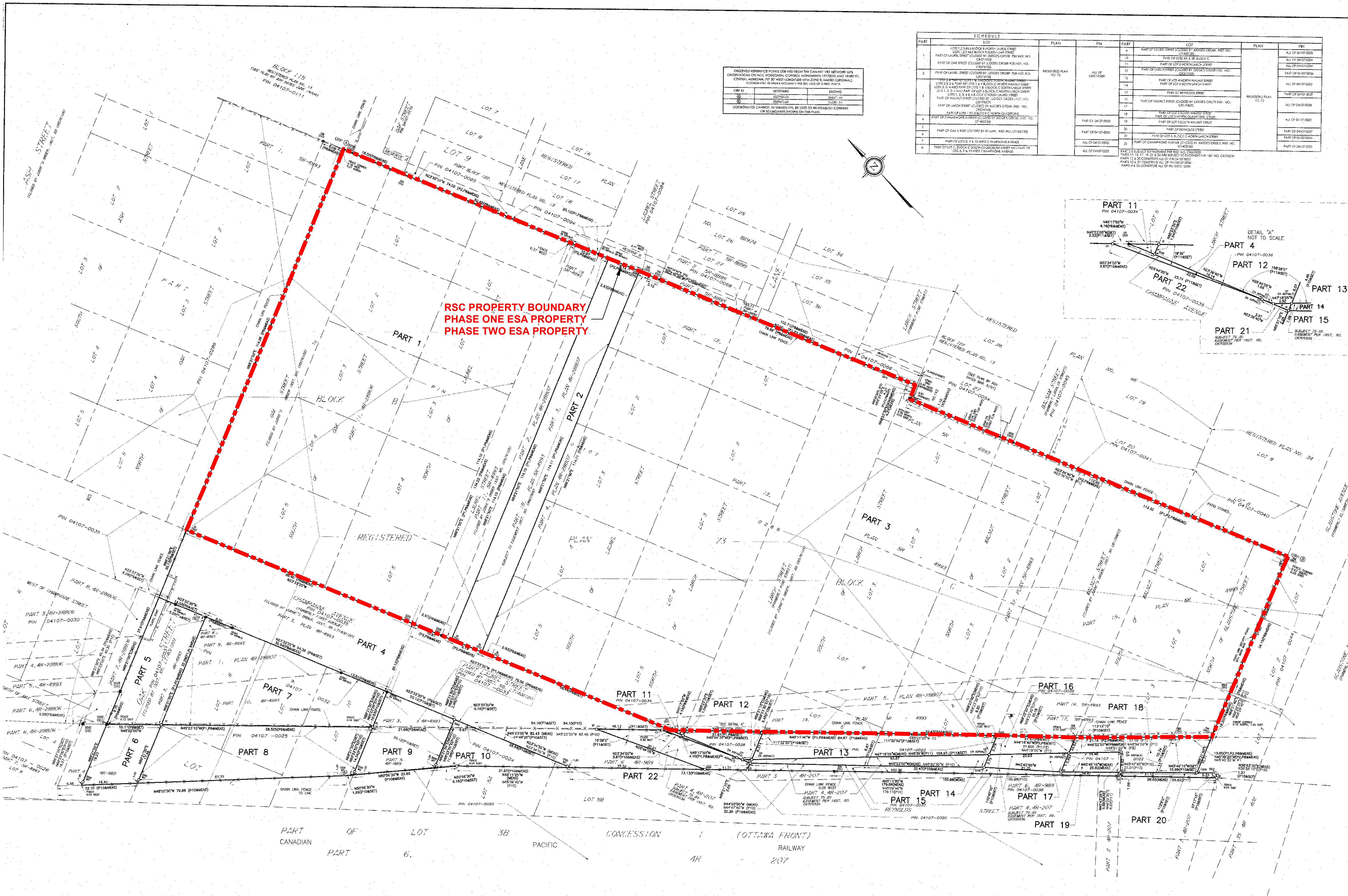
D. (i) Last Conveyance(s): PIN 04107 - 0288 Registration No. OC1873250

PIN 04107 - 0032 Registration No. OC1873250

(ii) Legal Description for Property Conveyed : Same as in last conveyance? Yes ☑ No ☐ Not known ☐

E. Tax Statements Prepared By: Michael Charles David Beaulne
1500-50 O'Connor
Ottawa K1P 6L2

LAND TRANSFER TAX STATEMENTS



I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT.

DATE: June 5/18

BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR

PLAN 4R-31143

RECEIVED AND DEPOSITED

DATE: June 6/18

A. Ward
REPRESENTATIVE FOR THE LAND REGISTRAR FOR THE LAND TITLES DIVISION OF OTTAWA-CARLETON No. 4

PLAN OF SURVEY of

LOTS 2 & 3 & PART OF LOT 1 BLOCK C(SOUTH WALNUT STREET)
LOTS 2, 3 & 4 & PART OF LOT 1 BLOCK C (NORTH WALNUT STREET)
LOTS 2, 3, 4 & 5 & PART OF LOT 1 BLOCK C (SOUTH LARCH STREET)
LOTS 1, 2, 3 & 4 AND PART OF LOT 5 BLOCK C (NORTH LARCH STREET)
LOTS 1, 2, 3, 4 & 5 BLOCK C (SOUTH LAUREL STREET)
LOTS 1, 2, 3, 4 & 5 BLOCK B (NORTH LAUREL STREET)
LOTS 1, 2, 3, 4 & 5 BLOCK B (SOUTH OAK STREET)
PART OF LOTS C, BLOCK B, (SOUTH OAK STREET) 8, 9 & 10 BLOCK B (WEST CHAMPAGNE AVENUE)
PART OF LOTS 1, 2 & 3 BLOCK C (NORTH GLADSTONE AVENUE)
PART OF LOTS 5A & 5B, BLOCK C,
PART OF OAK STREET (CLOSED BY JUDGE'S ORDER INST. NO. CR574103)
PART OF OAK STREET (CLOSED BY LT1402120)
PART OF LAUREL STREET (CLOSED BY JUDGE'S ORDER INST. NO. CR574103)
PART OF LAUREL STREET (CLOSED BY JUDGE'S ORDER INST. NO. LT1402120)
PART OF LARCH STREET (CLOSED BY JUDGE'S ORDER INST. NO. OC574103)
PART OF WALNUT STREET (CLOSED BY JUDGE'S ORDER INST. NO. CR179807)
PART OF REYNOLDS STREET
PART OF CHAMPAGNE AVENUE (CLOSED BY JUDGE'S ORDER INST. NO. LT1402120)
REGISTERED PLAN NO.73
(GEOGRAPHIC TOWNSHIP OF NEPEAN)
CITY OF OTTAWA

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 9th DAY OF MAY, 2018.

June 5/18
DATE

BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR

Stantec Geomatics Ltd.
CANADA LANDS SURVEYORS
ONTARIO LAND SURVEYORS
1331 CLYDE AVENUE, SUITE 400
OTTAWA, ONTARIO, K2C 3G4
TEL. 613.722.4420 FAX. 613.722.2799
stantec.com

DRAWN: CT	CHECKED: *	PM: CT	FIELD: ES	PROJECT No.: 161613791-114

"Table of areas of potential environmental concern"
(Refer to clause 16(2)(a), Schedule D, O. Reg. 153/04)

Area of potential environmental concern[1]	Location of area of potential environmental concern on phase one property	Potentially contaminating activity[2]	Location of PCA (on-site or off-site)	Contaminants of potential concern[3]	Media potentially Impacted (Ground water, soil and/or sediment)
APEC 1: PCA ID# 37-Current Dyed Diesel AST.	Storage yard adjacent to the northwest corner of the Site	PCA 28: Gasoline and Associated Products Storage in Fixed Tanks.	Off-Site	PHC and BTEX	Groundwater
APEC 2: PCA ID# 1-Former on-Site rail tracks as well as rail line adjacent to the west.	Former on-Site rail spurs running in several locations across the entire property during lumberyard use. Rail spurs running to east side of boiler room and along the west side of the depot building.	PCA 46: Rail Yards, Tracks, and Spurs.	On-Site	Metals*, PAHs, PHC	Soil
APEC 3: PCA ID# 2-Footprint of old buildings was built up with fill following 2015 demolition. Layer of fill was also identified across Site prior to demolition, which included waste products. Fill origin unknown.	Entire Site	PCA 30: Importation of Fill Material of Unknown Quality.	On-Site	Metals*, PAHs, PHC, VOC	Soil
APEC 4: PCA ID# 3-Former lumber yard on-Site.	Entire Site	PCA 59: Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products.	On-Site	Metals*, PAHs, VOCs	Soil
APEC 5a: PCA ID# 4a-Site used as Central Ordnance Depot for 50 years including storage of oils	Entire Site	PCA 28: Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PAHs, PHC, BTEX, VOCs	Groundwater and Soil
APEC 5b: PCA ID# 4b-Site used as Central Ordnance Depot for 50 years including storage of munitions and assorted military stores.	Entire Site	PCA 20: Explosives and Ammunition Manufacturing, Production and Bulk Storage	On-Site	Metals*, PHC, PAHs, VOCs	Groundwater and Soil

Area of potential environmental concern[1]	Location of area of potential environmental concern on phase one property	Potentially contaminating activity[2]	Location of PCA (on-site or off-site)	Contaminants of potential concern[3]	Media potentially Impacted (Ground water, soil and/or sediment)
APEC 5c: PCA ID# 4c-Site used as Central Ordnance Depot for 50 years including storage of paints	Entire Site	PCA 39: Paints Manufacturing, Processing, and Bulk Storage.	On-Site	Metals*, VOCs	Groundwater and Soil
APEC 6a: PCA ID# 5a-Historical heating oil ASTs.	West (2 tanks) of former boiler room.	PCA 28: Gasoline and Associated Products Storage in Fixed Tanks.	On-Site	PAHs, PHC, BTEX, VOC	Groundwater and Soil
APEC 6b: PCA ID# 5b-Historical heating oil ASTs.	South (1 tank) of former boiler room.	PCA 28: Gasoline and Associated Products Storage in Fixed Tanks.	On-Site	PAHs, PHC, BTEX, VOC	Groundwater and Soil
APEC 7: PCA ID# 6-Former printer operation on-Site.	Unknown, assume entire building footprint area.	PCA 31: Ink Manufacturing, Processing and Bulk Storage.	On-Site	VOCs	Groundwater and Soil
APEC 8: PCA ID# 7-Former 2500 gallon sump noted in building plans for the flammables storage room.	On-Site (NW corner, north of former boiler room).	PCA: N/A – Chemical Storage Room Sump.	On-Site	PHC, BTEX, VOCs	Groundwater and Soil
APEC 9: PCA ID# 8-Historical vehicle maintenance.	Unknown, assume entire Site.	PCA: N/A – Vehicle Maintenance, non-commercial.	On-Site	PHC, VOC	Groundwater and Soil
APEC 10: PCA ID# 9-Transformers on-Site within former warehouse.	Site within former warehouse footprint.	PCA 55: Transformer Manufacturing, Processing and Use.	On-Site	PCBs, PHC	Groundwater and Soil
APEC 11: PCA ID# 10-Waste generator codes for Petroleum distillates, waste oils and lubricants, light fuels, chemicals, and pharmaceuticals.	Entire Site	PCA: N/A – Generator of various types of waste.	On/Off-Site	PHC, VOC	Groundwater and Soil
APEC 12: PCA ID# 11-Several 205 L drums of waste oil were stored in the boiler room and minor staining was observed.	West side in former boiler room.	PCA: N/A – Petroleum Product (waste oil) Storage in non-fixed tanks (drums).	On-Site	PHC, BTEX	Groundwater and Soil

Area of potential environmental concern[1]	Location of area of potential environmental concern on phase one property	Potentially contaminating activity[2]	Location of PCA (on-site or off-site)	Contaminants of potential concern[3]	Media potentially Impacted (Ground water, soil and/or sediment)
APEC 13: PCA ID# 12-Numerous fires in the 1950's burned down portions of the depot which may have released contaminants.	On-Site (North and south ends of former warehouse, as well as well as two fires in unknown locations).	PCA: N/A – Historic building fires.	On-Site	PHC, Metals*, PAH, VOCs	Groundwater and Soil
APEC 14: PCA ID# 38-Parking area contains empty bulk liquid totes of unknown sources, 5 buckets (25 L each) marked "Hydraulic Fluid – Must be disposed of" on wooden pallet in paved area, soil piles, asphalt pile, empty drums. Several drums of unknown contents noted in 2001 in maintenance yard immediately adjacent to north.	Off-Site (adjacent to NW corner of Site).	PCA: N/A - Debris and Chemical Waste.	Off-Site	Metals*, PHC, PAH, VOCs	Groundwater
APEC 15: PCA ID# 29-Venice Iron Works and V Steel Works Limited.	17 Larch Street, adjacent to Site on east side.	PCA 34: Metal Fabrication.	Off-Site	Metals*, PHC, VOC	Groundwater and Soil

*Metals includes method group As, Sb, Se

Notes:

1 - Areas of potential environmental concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,
(a) identification of past or present uses on, in or under the phase one property, and
(b) identification of potentially contaminating activity.

2 - Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area

3 - When completing this column, identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011, as specified below:

List of Method Groups:

ABNs	PCBs	Metals	Electrical Conductivity
CPs	PAHs	As, Sb, Se	Cr (VI)
1,4-Dioxane	THMs	Na	Hg
Dioxins/Furans, PCDDs/PCDFs	VOCs	B-HWS	Methyl Mercury
OCs	BTEX	Cl-	Low or high pH,
PHCs	Ca, Mg	CN-	SAR

4 - When submitting a record of site condition for filing, a copy of this table must be attached

Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en francais, veuillez communiquer avec le ministère de l'Environnement et de l'Action en matière de changement climatique au 1-800-461-6290

"Table of current and past uses of the phase one property" (Refer to clause 16(2)(b), Schedule D, O.Reg. 153/04)

Year	Name of owner	Description of property use	Property use	Other observations from aerial photographs, fire insurance plans, etc
Prior to February 25, 1809	Crown	Undeveloped	Agricultural or Other use	No Aerial photos prior to 1928. Fire Insurance plans show the Site as undeveloped (i.e., no buildings) prior to 1948 but was occupied by a lumber yard starting in 1894 until sometime prior to 1928 where it appeared vacant. The surrounding area is entirely residential until commercial and light industrial businesses begin to build up along Gladstone Avenue, Loretta Avenue North and Preston Street subsequent to 1930.
February 25, 1809 to May 23, 1837	Robert Randall	Undeveloped	Agricultural or Other use	
May 23, 1837 to August 18, 1837	Peter Ayler Vallely	Undeveloped	Agricultural or Other use	
August 18, 1837 to May 2, 1844	William Price, Peter Mcbill, Nathaniel Gould & James Daries	Undeveloped	Agricultural or Other use	
May 2, 1844 to December 16, 1875	Nicholas Sparks	Undeveloped	Agricultural or Other use	
December 16, 1875 to Nov 10, 1894	Esther Slater	Undeveloped	Agricultural or Other use	
Nov 10, 1894 to May 27, 1921	John R. Booth	Lumberyard with rail spurs but no buildings.	Industrial use	
May 27, 1921 to August 17, 1942	J.R. Booth Ltd.	Lumberyard with rail spurs but no buildings.	Industrial use	
August 17, 1942 to March 2015	His Majesty the King (Crown)	Warehouse (Central Ordnance Depot). Also used as a Commercial Printer.	Industrial use	Warehouse covers most of the Site. Parking lot is built in the south of the Site. A boiler room with ASTs outside can be seen along the western edge of the warehouse.
March 2015 to May 11, 2017	His Majesty the King (Crown)	Vacant land with small area used for storage.	Industrial use	The off-Site paved area adjacent to the northwest portion of the Site is used for storage.
May 11, 2017 to present	Ottawa Community Housing Corporation (current owner)	Vacant land.	Industrial use	The off-Site paved area adjacent to the northwest portion of the Site is still used for storage.

Notes:

1 - for each owner, specify one of the following types of property use (as defined in O.Reg. 153/04) that applies:

Agriculture or other use Commercial use Community use

Industrial use Institutional use Parkland use Residential use

2 - when submitting a record of site condition for filing, a copy of this table must be attached

Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en francais, veuillez communiquer avec le ministère de l'Environnement et de l'Action en matière de changement climatique au 1-800-461-6290

REPORT

Conceptual Site Model for 933 Gladstone Avenue, Ottawa, Ontario

Report Extract

Submitted to:

Ottawa Community Housing Corporation
39 Auriga Drive
Ottawa, Ontario
K2E 7Y8

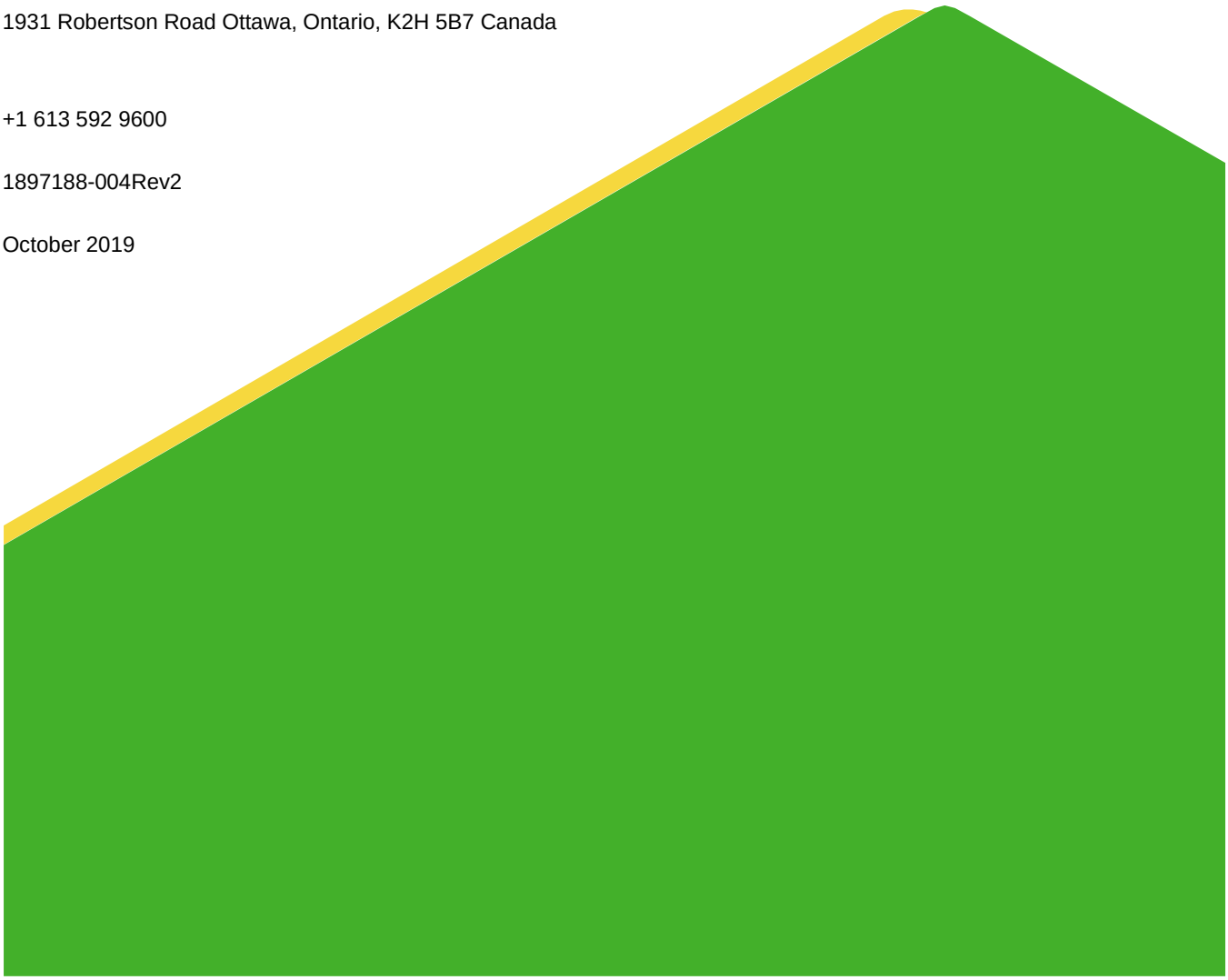
Submitted by:

Golder Associates Ltd.
1931 Robertson Road Ottawa, Ontario, K2H 5B7 Canada

+1 613 592 9600

1897188-004Rev2

October 2019



Distribution List

1 e-copy - Ottawa Community Housing Corporation

1 e-copy - Golder Associates Ltd.

Table of Contents

1.0 INTRODUCTION

The following is an extract from the Phase Two ESA report "Phase Two Environmental Site Assessment for 933 Gladstone Avenue, Ottawa, Ontario" dated October 2, 2019, reference 1897188-003Rev2 and should be read in conjunction with the remainder of the report. This extract has been prepared for the sole purpose of filing the Record of Site Condition and should not be used for any other purpose without the complete report and is subject to the same limitations included in said report.

2.0 PHASE TWO CONCEPTUAL SITE MODEL

The Phase Two Environmental Site Assessment ("ESA") Conceptual Site Model (CSM) described below is based on the results of this Phase Two ESA. The CSM consists of diagrams, cross-sections and figures that show the current condition of the RSC Property. The Phase Two Conceptual Site Model (CSM) consists of a narrative description of the current condition of the Site and accompanying diagrams, cross-sections and figures.

The figures that comprise the Phase Two CSM include:

Figure 1 – Key Plan

Figure 2 – Site Plan

Figure 3 – Groundwater Elevations and Interpreted Groundwater Flow Direction

Figure 4 – Soil Exceedances

Figure 5 – Groundwater Exceedances

Figure 6 – Cross Section A – A' With Soil and Groundwater Exceedances

Figure 7 – Cross Section B – B' With Soil and Groundwater Exceedances

Figure 8 – Vanadium Concentrations in Soil

Figure 9 – Cross Section A – A' With Vanadium Concentrations in Soil

Figure 10 – Cross Section B – B' With Vanadium Concentrations in Soil

Site Description

The RSC Property is located at 933 Gladstone Avenue, and is located on the north side of the street approximately 100 metres west of Preston Street. The Site has an area of 2.83 hectares and has been vacant with no structures or activities taking place on the property since 2015. Prior to 2015, the Site was part of a larger property that included the immediately adjacent lands to the north that was occupied by a large government owned warehouse structure referred to as the Central Ordnance Depot or Central Supply Depot that occupied the property for approximately 50 years. Contents of the warehouse included reported storage of paint, oils, munitions and assorted military stores. Prior to the warehouse, the Site was used as a lumberyard dating back to the late 1890s/early 1900s.

The neighbouring properties include residential, commercial, and light industrial land uses. An OC Transpo light rail line is in a trench near the west perimeter of the Site. Many of the neighbouring properties within 250 metres of the Site are currently and/or were historically used for light industrial purposes as well as commercial uses including vehicle garages, fuel dispensing facilities and dry cleaning facilities.

Based on information obtained in the Phase One ESA, fifty-one (51) potentially contaminating activities (PCA) were identified in the Phase One Study Area, twelve of which were on the RSC Property. Based on site characteristics and the locations of the off-Site PCA, a total of 15 Areas of Potential Environmental Concern (APEC) were identified across the Site as described below. These APEC were assessed by a Phase Two ESA evaluating potential soil and groundwater impacts from contaminants of concern including metals, petroleum hydrocarbons, volatile organic compounds, polycyclic aromatic hydrocarbons and/or polychlorinated biphenyls.

Potential Sources of Contamination

Potentially Contaminating Activities

Based on the information obtained as part of the Phase One ESA Update, the following potentially contaminating activities ("PCAs") were identified.

Summary of PCAs within the RSC Property.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
1	On-Site	**PCA 46: Rail Yards, Tracks, and Spurs** (Former on-Site rail spurs running in several locations across the entire property during lumberyard use. Rail spurs running to east side of boiler room and along the west side of the depot building)	Aerial photos, FIP, Site Visit, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
2	On-Site (Entire Site)	**PCA 30: Importation of Fill Material of Unknown Quality** (Footprint of old building was built up with fill following 2015 demolition. Layer of fill was also identified across Site prior to demolition, which included waste products. Fill origin unknown)	Site observations, Pinchin 2015 Phase One ESA Trow 2005 Phase I & II ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
3	On-Site (Entire Site)	**PCA 59: Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products** (Former lumber yard on-Site)	FIP, Chain of Title, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
4a	On-Site (Entire Site)	**PCA 28: Gasoline and Associated Products in Fixed Tanks** (Site used as Central Ordnance Depot for 50 years including reported storage of oils)	FIP, HLUI, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
4b	On-Site (Entire Site)	**PCA 20: Explosives and Ammunition Manufacturing, Production and Bulk Storage** Site used as Central Ordnance Depot for 50 years including reported storage of ammunition/ordnance and assorted military stores)	FIP, HLUI, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
4c	On-Site (Entire Site)	**PCA 39: Paints Manufacturing, Processing, and Bulk Storage** Site used as Central Ordnance Depot for 50 years including reported storage of paint)	FIP, HLUI, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
5a	On-Site (West (2 tanks) of former boiler room)	**PCA 28: Gasoline and Associated Products in Fixed Tanks** (Historical heating oil ASTs)	1958 – 2014 Aerial photos, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
5b	On-Site (South (1 tank) of former boiler room)	**PCA 28: Gasoline and Associated Products in Fixed Tanks** (Historical heating oil ASTs)	1958 – 2014 Aerial photos, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
6	On-Site (Unknown, assume entire site)	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (Former printer operation on-Site)	2001/02 Street Directory, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
7	On-Site (SW corner of former building, north of former boiler room)	**PCA: N/A – Chemical Storage Room Sump** (2500 gallon sump was noted in building plans for the flammables storage room)	1970/71 Building Plans	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
8	On-Site (Unknown, assume entire Site)	**PCA: N/A – Vehicle Maintenance** (Reported historical vehicle maintenance, non-commercial)	Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
9	On-Site (Site within former warehouse footprint)	**PCA 55: Transformer Manufacturing, Processing and Use** (Transformers on-Site within former warehouse)	Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
10	On-Site	**PCA : N/A –Generator of Various Types of Waste** (Waste generator codes for petroleum distillates, waste oils and lubricants, light fuels, chemicals, and pharmaceuticals)	EcoLog ERIS, Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
11	On-Site (West side in former boiler room)	**PCA : N/A – Petroleum Product Drum Storage** "Several 205 L drums of waste oil (non-fixed tanks) were stored in the boiler room and minor staining was observed"	Pinchin 2015 Phase One ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.
12	On-Site (North and south ends of former warehouse, as well as two fires in unknown locations)	**PCA : N/A – Historic Building Fires** (Numerous fires in the 1950's burned down portions of the depot which may have released contaminants including oil and paint)	1900 Ottawa-Hull Fire Map, 1950's Depot Fire Articles, Trow 2005 Phase I & II ESA	As per Reg. 153/04. All PCAs found on the Phase One Property are considered APECs.

Summary of PCAs within the Phase One Study Area but not on the Phase One Property.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
PCAs North of Site				
13	1040 Somerset Street	**PCA 10: Commercial Autobody Shop** (Paradise Auto Repair)	HLUI	This PCA is not considered likely to contribute to an APEC on Site. This is due the PCA being down-gradient of the Site according to the local inferred groundwater flow.
14	1010 Somerset Street	**PCA: N/A – Drums of Unknown Contents** (Several drums of unknown contents noted in 2001 in maintenance yard)	Aqua Terre 2001 Phase I ESA, Pinchin 2015 Phase One ESA	This PCA is considered likely to contribute to an APEC on Site. This is due to the PCA being directly adjacent to the north portion of the Site.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
15	969 Somerset Street	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (Genesove press Limited – Printers)	HLUI	These PCAs North of the Phase One Property are not considered likely to contribute to an APEC on Site. This is due these PCAs being down-gradient of the Site according to the local inferred groundwater flow.
16	903 Somerset Street	**PCA 37: Operation of Dry Cleaning Equipment** (Expert Cleaner and Dyer) **PCA 17: Dye Manufacturing, Processing, and Bulk Storage** (Expert Cleaner and Dyer)	HLUI	
17	896 Somerset Street	**PCA 10: Commercial Autobody Shop** (Johnny Closs – Auto repair) **PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Johnny Closs – Auto repair)	HLUI	
18	893 Somerset Street	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (Acadian Printing – Printers)	HLUI	
19	890 Somerset Street	**PCA 10: Commercial Autobody Shop** (Jim Frisby Holdings Limited – Auto repair)	HLUI	
20	55 Breezehill Avenue North	**PCA 10: Commercial Autobody Shop** (Breezehill Auto Body) (Japan Auto SVC Inc. – Auto repair) **PCA 49: Salvage Yard including Automobile Wrecking** (A & T Autoparts)	HLUI, EcoLog ERIS	
21	53 Breezehill Avenue North	**PCA – N/A: Bulk Storage of Coal** (Bruce Coal Co.)	HLUI	
PCAs East of Site				
22	241 Preston Street	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Preston Auto Centre, Mazzocato Service Station, Pannuccio BP	EcoLog ERIS, Street Directory, HLUI	These PCAs east of the Phase One Property are not considered likely to contribute to an APEC on Site. This is due to their distance from the Site

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
		Service Station, Petro Canada Service Station – one UST) **PCA 10: Commercial Autobody Shop** (Preston Auto Centre, Jason Auto Centre, Preston Garage)		(>100 m) and their position cross-gradient of the Site according to the local inferred groundwater flow.
23	225 Preston Street	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Malmberg Auto Service – two USTs) **PCA 10: Commercial Autobody Shop** (United Garage, Malmberg Auto Service, Carm's Auto Repair)	EcoLog ERIS, Street Directory, HLUI	
24	215 Preston Street	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Esso Home Comfort)	HLUI	
25	193 Preston Street	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Aircon Fuels)	HLUI	
26	187 Preston Street	**PCA 53: Tannery** (Farmer and Garrett – Tannery)	HLUI, 1988 Intera Report	
27	164 Preston Street	**PCA 10: Commercial Autobody Shop** (Ana Transportation Inc. – Auto Repair)	HLUI	
28	153 Preston Street	**PCA 59: Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products** (Preston & Lieff Glass – Lumber Wholesale)	HLUI	
29	17 Larch Street	**PCA 34: Metal Fabrication** (Venice Iron Works, V Steel Works Limited.)	EcoLog ERIS, Street Directory, HLUI	This PCA has a high likelihood of contributing to an APEC on-Site due to its position directly adjacent to the Site, despite being down/cross-gradient of the inferred groundwater flow.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
				This Site has been confirmed across multiple sources. The likely contaminants would be metals, PHC and VOCs.
PCAs South of Site				
30	284 Preston Street	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (C Corp (Ontario) – one UST) (Top Value Gasmart, Mac's Convenience Stores Inc.)	EcoLog ERIS, Street Directory, HLUI	These PCAs southeast of the Phase One Property on Preston Street are not considered likely to contribute to an APEC on Site. This is due to their distance from the Site (>100 m) and their position cross-gradient of the Site according to the local inferred groundwater flow.
31	280 Preston Street	**PCA 37: Operation of Dry Cleaning Equipment** (Superior Cleaners – Dry cleaning)	Street Directory, HLUI	
32	916 Gladstone Avenue	**PCA 10: Commercial Autobody Shop** (R+M Automotive Finishes, Aberousal Body Repair) (Khera Auto Repair, A V I Auto Centre, P B Auto Centre, Dragon Auto Service)	Street Directory, HLUI	These PCAs all are slightly southeast of the Phase One Property, and because of this, are not considered likely to contribute to an APEC on Site. While these PCAs are within 100 m of the Site, their positions place them cross-gradient of the Site rather than up-gradient, according to the local inferred groundwater flow.
33	910 Gladstone Avenue	**PCA 10: Commercial Autobody Shop** (Sal Auto & Truck Service Centre.)	Street Directory, HLUI	
34	203 Louisa Street	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (L'Ora Di Ottawa – Newspaper Printer)	EcoLog ERIS, HLUI	
35	188 Louisa Street	**PCA 10: Commercial Autobody Shop** (Motorworks – Auto Repair)	Street Directory	
36	West end of St. Anthony Street	**PCA 41: Petroleum-derived Gas Manufacturing, Processing, and Bulk Storage** (British American Oil Co. Limited)	1988 Intera Report	

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
PCAs West of Site				
37	Off-Site (NW corner)	**PCA 28: Gasoline and Associated Products in Fixed Tanks** (Current Dyed Diesel AST)	Site observations	This PCA is considered likely to contribute to an APEC on Site. This is due to the PCA being directly adjacent to the northwest portion of the Site.
38	Off-Site (NW corner)	**PCA : N/A – Storage of Debris and Chemical Waste** (Parking/storage area contains empty bulk liquid totes of unknown sources, 5 buckets (25 L each) marked “Hydraulic Fluid – Must be disposed of” on wooden pallet in paved area, soil piles, asphalt pile, empty drums.	Site observations	This PCA is considered likely to contribute to an APEC on Site. This is due to the PCA being directly adjacent to the northwest portion of the Site.
39	West of Site	**PCA 46: Rail Yards, Tracks, and Spurs** (Multiple rail lines historically running in north-south direction immediately west of Site)	Aerial photos, FIP, Site Visit, Pinchin 2015 Phase One ESA	This PCA is considered likely to contribute to an APEC on Site. This is due to the PCA being directly adjacent to the Site.
40	975 Gladstone Avenue	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (British American Bank Note Co. Limited, BA Banknote Inc.)	EcoLog ERIS, Street Directory, HLUI, 1988 Intera Report, FIPs (1948, 1956)	PCAs west of the Phase One Property are not considered likely to contribute to an APEC on Site. This is due to their positions cross-gradient of the Site rather than up-gradient, according to the local inferred groundwater flow and their distance from the Site >100 m away.
41	971 Gladstone Avenue	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Mr. Gas Limited – one UST)	EcoLog ERIS	

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
42	952 Gladstone Avenue	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Lyle Blackwell Limited – one gasoline UST) **PCA 37: Operation of Dry Cleaning Equipment** (Lyle Blackwell Limited Cleaners & Dyers) **PCA 17: Dye Manufacturing, Processing, and Bulk Storage** (Lyle Blackwell Limited Cleaners & Dyers)	FIPs (1948), HLUI	These PCAs are up gradient of the Site but are considered unlikely to contribute to an APEC due to their distance from the Site >100 m away.
43	951 Gladstone Avenue	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (Love Printing Service Limited)	HLUI	
44	949 Gladstone Avenue	**PCA 34: Metal Fabrication** (Vesuvio Iron Works) **PCA 10: Commercial Autobody Shop** (Mario Garage, Orville's Auto Electric)	EcoLog ERIS, Street Directory, HLUI	
45	940 Gladstone Avenue	**PCA 34: Metal Fabrication** (Hodgins Bros. Limited – Heating equipment manufacturing)	HLUI	
46	175 Loretta Avenue North	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (General Supply Co. of Canada Limited – One gasoline UST, City of Ottawa – Two historic USTs) **PCA 39: Paints Manufacturing, Processing, and Bulk Storage** (General Supply Co. Of Canada Limited) **PCA 57: Vehicles and Associated Parts Manufacturing** (General Supply Co. Of Canada Limited, City of Ottawa)	EcoLog ERIS, Street Directory, HLUI, TSSA, 2016 175 Loretta Ave. N. Monitoring Report	This PCA is not considered likely to contribute to an APEC on the Site since available documents indicate that remediation activities had been carried out and that there is reportedly little to no mobilization of contaminants off the 175 Loretta Ave. N. property.

PCA ID#	Location	Potentially Contaminating Activities as per Table 2 of Reg.153/04	Information Sources	Rationale for the PCA to Contribute to an APEC on the Site
47	157 Loretta Avenue North	**PCA 52: Storage, Maintenance, Fuelling and Repair of Vehicles** (City Queensway Taxi – Auto fleet repair and storage)	Street Directory	These PCAs southwest of the Phase One Property are up gradient of the Site but are considered unlikely to contribute to an APEC due to their distance from the Site >50 m away.
48	155 Loretta Avenue North	**PCA 31: Ink Manufacturing, Processing, and Bulk Storage** (Canada Printing Ink, Canadian Toners, Popular Printing) **PCA 54: Textile Manufacturing and Processing** (Regional Textiles)	Street Directory, HLUI,	
49	145 Loretta Avenue North	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Bell Telephone Co. Of Canada Limited – One gasoline UST)	HLUI, FIP (1956)	
50	131 Loretta Avenue North	**PCA 28: Gasoline and Associated Products Storage in Fixed Tanks** (Hall Fuel Limited – One gasoline UST)	HLUI, FIP (1956)	
51	111 Breezehill Avenue North	**PCA 10: Commercial Autobody Shop** (907462 Ontario Limited, Grandtech Auto – Auto repair)	HLUI	

Areas of Potential Environmental Concern

The following APECs were identified, their locations can be seen in Figure 2:

Area of Potential Environmental Concern	Location of APEC on RSC Property	Potentially Contaminating Activity	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC 1: PCA ID# 37-Current Dyed Diesel AST.	Storage yard adjacent to the northwest corner of the Site	PCA 28: Gasoline and Associated Products in Fixed Tanks.	Off-Site	PHC and BTEX	Groundwater
APEC 2: PCA ID# 1-Former on-Site rail tracks as well as rail line adjacent to the west.	Former on-Site rail spurs running in several locations across the entire property during lumberyard use. Rail spurs running to east side of boiler room and along the west side of the depot building.	PCA 46: Rail Yards, Tracks, and Spurs.	On-Site	Metals*, PAHs, PHC	Soil
APEC 3: PCA ID# 2-Footprint of old buildings was built up with fill following 2015 demolition. Layer of fill was also identified across Site prior to demolition, which included waste products. Fill origin unknown.	Entire Site	PCA 30: Importation of Fill Material of Unknown Quality.	On-Site	Metals*, PAHs, PHC, VOC	Soil

Area of Potential Environmental Concern	Location of APEC on RSC Property	Potentially Contaminating Activity	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC 4: PCA ID# 3-Former lumber yard on-Site.	Entire Site	PCA 59: Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products.	On-Site	Metals*, PAHs, VOCs	Soil
APEC 5a: PCA ID# 4a-Site used as Central Ordnance Depot for 50 years including storage of oils.	Entire Site	PCA 28: Gasoline and Associated Products in Fixed Tanks.	On-Site	PAHs, PHC, BTEX, VOCs	Groundwater and Soil
APEC 5b: PCA ID# 4b-Site used as Central Ordnance Depot for 50 years including storage munitions and assorted military stores.	Entire Site	PCA 20: Explosives and Ammunition Bulk Storage	On-Site	Metals*, PHC, PAHs, VOCs	Groundwater and Soil
APEC 5c: PCA ID# 4c-Site used as Central Ordnance Depot for 50 years including storage of oils,	Entire Site	PCA 39: Paints Manufacturing, Processing, and Bulk Storage.	On-Site	Metals*, VOCs	Groundwater and Soil
APEC 6a: PCA ID# 5a-Historical heating oil ASTs.	West (2 tanks) of former boiler room.	PCA 28: Gasoline and Associated Products in Fixed Tanks.	On-Site	PAHs, PHC, BTEX, VOC	Groundwater and Soil
APEC 6b: PCA ID# 5b-Historical heating oil ASTs.	South (1 tank) of former boiler room.	PCA 28: Gasoline and Associated Products in Fixed Tanks.	On-Site	PAHs, PHC, BTEX, VOC	Groundwater and Soil

Area of Potential Environmental Concern	Location of APEC on RSC Property	Potentially Contaminating Activity	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC 7: PCA ID# 6-Former printer operation on-Site.	Unknown, assume entire building footprint area.	PCA 31: Ink Manufacturing, Processing, and Bulk Storage.	On-Site	VOCs	Groundwater and Soil
APEC 8: PCA ID# 7-Former 2500 gallon sump noted in building plans for the flammables storage room.	On-Site (NW corner, north of former boiler room).	PCA: N/A – Chemical Storage Room Sump.	On-Site	PHC, BTEX, VOCs	Groundwater and Soil
APEC 9: PCA ID# 8-Historical vehicle maintenance.	Unknown, assume entire Site.	PCA: N/A – Vehicle Maintenance, non-commercial.	On-Site	PHC, VOC	Groundwater and Soil
APEC 10: PCA ID# 9-Transformers on-Site within former warehouse.	Site within former warehouse footprint.	PCA 55: Transformer Manufacturing, Processing and Use.	On-Site	PCBs, PHC	Groundwater and Soil
APEC 11: PCA ID# 10-Waste generator codes for Petroleum distillates, waste oils and lubricants, light fuels, chemicals, and pharmaceuticals.	Entire Site	PCA: N/A – Generator of various types of waste.	On/Off-Site	PHC, VOC	Groundwater and Soil

Area of Potential Environmental Concern	Location of APEC on RSC Property	Potentially Contaminating Activity	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC 12: PCA ID# 11-Several 205 L drums of waste oil were stored in the boiler room and minor staining was observed.	West side in former boiler room.	PCA: N/A – Petroleum Product (waste oil) in non-fixed tanks (drums).	On-Site	PHC, BTEX	Groundwater and Soil
APEC 13: PCA ID# 12-Numerous fires in the 1950's burned down portions of the depot which may have released contaminants.	On-Site (North and south ends of former warehouse, as well as well as two fires in unknown locations).	PCA: N/A – Historic building fires.	On-Site	PHC, Metals*, PAH, VOCs	Groundwater and Soil
APEC 14: PCA ID# 38-Parking area contains empty bulk liquid totes of unknown sources, 5 buckets (25 L each) marked "Hydraulic Fluid – Must be disposed of" on wooden pallet in paved area, soil piles, asphalt pile, empty drums. Several drums of unknown contents noted in 2001 in maintenance yard immediately adjacent to north.	Off-Site (adjacent to NW corner of Site).	PCA: N/A - Debris and Chemical Waste.	Off-Site	Metals*, PHC, PAH, VOCs	Groundwater

Area of Potential Environmental Concern	Location of APEC on RSC Property	Potentially Contaminating Activity	Location of PCA (on-Site or off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or Sediment)
APEC 15: PCA ID# 29-Venice Iron Works and V Steel Works Limited.	17 Larch Street, adjacent to Site on east side.	PCA 34: Metal Fabrication.	Off-Site	Metals*, PHC, VOC	Groundwater and Soil

* Metals includes MOE method groups Metals, As, Sb, Se

Based on the August 2018 Phase One ESA Update, conditions at the RSC Property and surrounding area have not changed since 2017, therefore, it is Golder's opinion that no additional APECs are present and that no additional sampling and/or analysis is required to satisfy the objectives of the Phase Two ESA.

Subsurface Structures and Utilities and Potential Migration of COCs

Underground utility drawings available for the Phase Two Property indicated utility connections to the former building were abandoned during demolition, including water, sewer, electrical, natural gas, cable and telephone. Utility mains, including storm sewers observed during the site reconnaissance continue to be present. The presence of subsurface utilities and structures at the Site could act as preferential pathways promoting the migration of COCs as the water table is inferred to intercept buried utilities and subsurface structures at the Phase Two Property; however, no COCs are present in groundwater exceeding the Site condition standards.

Physical Setting

Stratigraphy

Boreholes were advanced to a maximum depth of 5.18 mbgs. In general, the subsurface soil conditions consisted of a layer of fill overlying native overburden. The fill generally consists of sandy clay and silty sand with occasional trace brick and wood fragments encountered in some boreholes. The fill layer extends from about 0.4 to 3.0 metres below the existing ground surface. A deposit of silty clay to clay or silty sand exists below the fill generally extending to the maximum depth of drilling except for a few boreholes where a deposit of silty sand glacial till was encountered. Bedrock was encountered during drilling at some boreholes (BH17-04, BH17-18, BH17-20, and BH17-23) along the central west side near the former boiler room at depths of 3 – 4 mbgs. Bedrock was not encountered at the remaining boreholes, which ranged in depth from 3.35 – 5.18 mbgs.

Given that the average thickness of overburden at the Site is greater than 2 m, the Site is not considered to be a shallow soil property as defined by O. Reg 153/04 (as amended).

Hydrogeological Characteristics

Groundwater Levels and Flow Directions

Based on the soil conditions encountered in the boreholes and the water level measurements, the silty clay to clayey silt unit was inferred to act as an aquifer. Static groundwater levels were measured in the monitoring wells located across the Site. Figure 3 shows April 30, 2018 groundwater elevations and the interpreted groundwater flow direction. Groundwater elevations at the Site ranged from 95.95 to 99.47 masl and were encountered at

depths of 1.02 to 4.55 mbgs. Based on the interpreted groundwater elevation contours, the inferred direction of groundwater flow is to the east-northeast, towards the Ottawa River. Groundwater flow in the western portion of the Site is expected to be influenced by the nearby trench for the OC Transpo rail line. The regional groundwater flow direction is expected to be towards the Ottawa River, located approximately 1 km to the north of the Site.

Horizontal Hydraulic Gradients

The horizontal hydraulic gradient was calculated based on the water level contours presented on Figure 3. The average horizontal hydraulic gradient in the shallow groundwater is 0.04 m/m, with gradients ranging from 0.03 to 0.049 m/m.

Vertical Hydraulic Gradient

Vertical hydraulic gradients were not calculated as no COCs were identified in groundwater exceeding the site condition standards and as such, no nested monitoring wells were installed at the Site.

Shallow Soil Property or Water Body

Bedrock was encountered during drilling on some boreholes (BH17-04, BH17-18, BH17-20, and BH17-23) along the central west side near the former boiler room at depths of 3 – 4 mbgs. Bedrock was not encountered at the remaining boreholes, which ranged in depth from 3.35 – 5.18 mbgs. Therefore, including findings from the Phase One, the approximate depth to bedrock is assumed to be between 3 and 10 mbgs. As such, based on the depth to bedrock encountered at the Site, the Site is not considered a shallow soil property.

Potable Water Wells

No potable water wells are located on the Site or within 250 m of the Site, based on the results of the Phase One ESA. As such, the Site is not considered to be a potable water site.

Environmentally Sensitive Areas

There is no habitat for potential species of risk at the Site. In addition, based on the information provided by the Ministry of Natural Resource and Forestry, no areas of natural significance are present on the Site or within 30 m of the Site. Additionally, the average pH of surface soil is 5≤pH≤9 and the pH of sub-surface soil meets the requirement that 5≤pH≤11. As such, the RSC Property is not considered an environmentally sensitive area as defined by O.Reg. 153/04 (as amended).

Proposed Building and Other Structures

There are no buildings or other structures currently present at the Site. Proposed future use of the Site is a mixture of residential, institutional (school), parkland and commercial redevelopment that is expected to include a number of buildings of varying size, height and density.

Findings of the Phase Two ESA with Respect to APECs

To address the APECs identified at the Site, soil and groundwater sampling and analysis of potential COCs was completed as part of this Phase Two ESA. MECP Table 3 Standards (April 15, 2011) were used for comparison of the soil and groundwater results. A summary of the findings of the Phase Two ESA with respect to the identified APECs is provided in plan and cross-section view on Figures 4 through 7.

The results of this Phase Two ESA indicate that no soil or groundwater impacts associated with the fifteen APECs were identified in any of the analyzed soil and groundwater samples collected from the boreholes and the monitoring wells completed at the Site. The concentrations of the COCs (PHC, VOCs, PAHs, Metals (including

As, Sb, Se), and PCBs) in soil and/or groundwater associated with the fifteen APECs were all below the MECP Table 3 Standards, except vanadium. The soil analytical results identified vanadium concentrations ranging from 87 µg/g to 94 µg/g in four of the 20 soil samples submitted for metals analysis above the applicable standard of 86 µg/g. Vanadium exceedances were only found in clay/silty clay soil at depths varying from 1.52 to 3.81 metres in boreholes located in the northern portion of the Site. Vanadium concentrations in soil are shown in plan and cross-section view on Figures 8, 9 and 10.

In Golder's experience, the presence of naturally occurring metals such as vanadium, barium and cobalt at concentrations above the MECP Table 3 Standards is common in Eastern Ontario and Western Quebec where the clay is of marine origin. Golder is of the professional opinion that the presence of vanadium in silty clay soil at the Site is naturally occurring as opposed to the result of a Potentially Contaminating Activity. To support Golder's opinion and conclusion, a multiple lines of evidence approach was used that included a review of possible sources for vanadium impacts, along with an analysis of site-specific metals data in silty clay samples compared to available metals data in silty clay samples from locations across the Ottawa region.

Possible Sources of Vanadium

Vanadium as a specific contaminant of concern is not related to the Potentially Contaminating Activities or APEC that were identified for the Site by the Phase One and Two ESAs. In the absence of a clear correlation between the identified COCs and the elevated concentrations of vanadium in silty clay soil samples, Golder reviewed possible sources of vanadium impacts and considered their applicability to the Site. Possible sources of vanadium include:

- Steel manufacturing – Vanadium is commonly used as an additive in the steel manufacturing process. Metal/steel manufacturing activities were not identified as the Site or in the surrounding area. A small-scale welding/metal repair operation is located adjacent to the east of the Site but is not a manufacturing operation. This was evaluated during the Phase Two ESA (APEC #15).
- Railway lines/spurs – Elevated levels of metals are commonly encountered in slag material used as railway ballast. The historic use of coal and/or oil burning engines on the railways may be a source for vanadium as it is a by-product of combustion so deposition from train exhaust may have caused soil impacts. This was evaluated during the Phase Two ESA (APEC #2) due to the presence of a rail line located immediately adjacent to the west of the site in addition to several spurs formerly located on the Site.
- Lumber storage – Elevated levels of metals are commonly associated with lumber/wood preservatives and the Site was historically used for lumber storage. This was evaluated during the Phase Two ESA (APEC #4).
- Road salt – Vanadium has been reported as a constituent in some road salt. The Phase One ESA did not identify historic use of the Site as a snow dump and a large warehouse building occupied a larger portion of the Site from 1942 to 2015, thus minimising the potential for large quantities of road salt to have been applied to the Site. Elevated concentrations of parameters consistent with road salt impacts were not found in soil or groundwater at the site. As such, this not considered to be a source for the identified vanadium exceedances.

The Phase Two ESA results did not identify the presence of metals (other than vanadium) at elevated concentrations, noting that metals concentrations in the surficial fill layer are lower than in the underlying native silty clay. It is further noted that the sources listed above routinely cause elevated concentrations of several different metals and not a single parameter such as vanadium and that other contaminants commonly related to

the APEC, such as PAHs, were not identified at elevated concentrations. Based on the above review of potentially applicable sources of vanadium impacts, Golder is of the opinion that the elevated concentrations of vanadium in silty clay at the Site are not the result of a Potentially Contaminating Activity.

Presence of Naturally Occurring Vanadium

To support Golder's professional opinion that the presence of vanadium in silty clay soil at concentrations above the MECP Table 3 Standard at the Site is naturally occurring and therefore not the result of a Potentially Contaminating Activity, available metals data in silty clay samples from locations across the Ottawa region were compiled and analysed to evaluate the concentrations and variability of these metals. Golder considered data not only for vanadium, but also for barium and cobalt as these parameters are also known to naturally occur at concentrations above MECP Table 3 Standard in Ottawa marine clay/silty clay.

Barium, cobalt and vanadium concentrations in Ottawa area soil were compiled for a number of datasets including a) the fill layer at the Site; b) the silty clay layer at the Site; and, c) six (6) datasets from silty clay sites; across Ottawa. For each of the datasets it was confirmed that a) the Phase One ESA (when available) did not indicate metals as contaminants of concern and/or b) that a Phase Two ESA for the site confirmed that metals were not a COC. Furthermore, for the datasets presented, the concentration of all COCs met either the MECP Table 1 background generic standards or, where marginal exceedances of the MECP Table 1 Standards were present, the samples met the MECP Table 3 Standards. As such, the soil data used in the analysis is interpreted to be from samples that were not impacted by Potentially Contaminating Activities.

Analysis of Ratio of Barium to Cobalt and Barium to Vanadium

The data sets were evaluated by comparing the ratios of barium to cobalt and barium to vanadium at the Site to the Ottawa Regional dataset. If the ratio of the three metals between sites/datasets is similar, it suggests that the presence of the metals is natural (i.e., the same natural deposition process resulted in similar distribution of metals at each site). A large variation in ratios between the sites suggests that the impacts may be due to a contaminant source (i.e., the elevated concentrations of a metal has likely affected the ratio).

The ratios were found to be similar suggesting that the presence of vanadium, barium and cobalt across Ottawa are naturally occurring, and provides another line of evidence that the presence of vanadium at 933 Gladstone Avenue is a naturally occurring background condition.

Analysis of Variability of Datasets

The variability of the 933 Gladstone Avenue and Ottawa Regional datasets were evaluated by comparing the average concentrations of barium, cobalt and vanadium using Box and Whisker Charts (Box Plots). The average metal concentrations in the Site fill are lower than the observed range for the Ottawa Regional Dataset as well as the average concentration for the Site silty clay. This suggests that the elevated presence of these metals in the silty clay layer (which is the layer of silty clay at the Site with MECP Table 3 exceedances) at the Site are not caused by the overlying fill layer. In addition, the average metal concentrations in the silty clay at the Site fall within the observed ranges for other silty clay samples in the Ottawa Region.

Based on the above described analysis, the data indicates vanadium in the silty clay at the Site is not elevated above what is typical for silty clay in the Ottawa area thus providing another line of evidence that the presence of vanadium at 933 Gladstone Avenue is a naturally occurring background condition.

Conclusion of Multiple Lines of Evidence Review

Golder is of the professional opinion that the presence of vanadium in silty clay soil at the Site is naturally occurring as opposed to the result of a Potentially Contaminating Activity. This opinion is supported by the multiple lines of evidence, including:

- The concentrations of the COCs in soil and/or groundwater associated with the Areas of Potential Environmental Concern were all below the MECP Table 3 Standards except vanadium. Vanadium as a specific contaminant of concern is not related to the PCA or APEC that were identified for the Site by the Phase One and Two ESAs. Furthermore, a detailed review of possible sources of vanadium did not identify any sources that were applicable to the Site.
- The ratios of metals known to naturally occur at concentrations above MECP Table 3 Standards, including barium and cobalt in addition to vanadium, were examined. The ratios of barium to cobalt and barium to vanadium were examined for Site data as well as six local datasets. The ratios for each dataset were found to be similar suggesting that the metals are naturally occurring background metals resulting from the same natural deposition process (in a marine environment for Ottawa area clays) that resulted in similar distribution of metals.
- The average concentrations of barium, cobalt and vanadium in the fill at the Site are less than in the underlying silty clay suggests that the fill at the Site is not a source of vanadium. The variability of each dataset was examined, and it was further shown that the average metal concentrations of the fill from the Site were lower than the observed ranges for the Ottawa Regional Dataset. Furthermore, the average metal concentrations in the silty clay at the Site (where the MECP Table 3 exceedances occur) fell within the observed chemical ranges from the Ottawa Regional Dataset. The analysis indicated that the metal concentrations in the silty clay are not elevated above what is normal for silty clay in the Ottawa area.

Based on the above, it is Golder's interpretation and professional opinion that the presence of vanadium in native clay/silty clay at concentrations above the MECP Table 3 Standards at the Site are naturally occurring background conditions and not the result of a PCA or APEC. Vanadium is therefore not a considered a contaminant of potential concern and the values shown in the analytical summary tables are not highlighted nor are they shown on figures as an exceedance.

Meteorological and Climatic Considerations

Seasonal fluctuation in water levels on the Site should be expected. Given the limited number of monitoring events seasonal trends could not be identified, however shallow groundwater water levels are typically highest following the spring recharge and decline throughout the summer and fall months into the winter, as evidenced by the higher water levels measured in April 2018 (spring) compared to February 2017 (winter).

Soil Vapour Intrusion Pathways

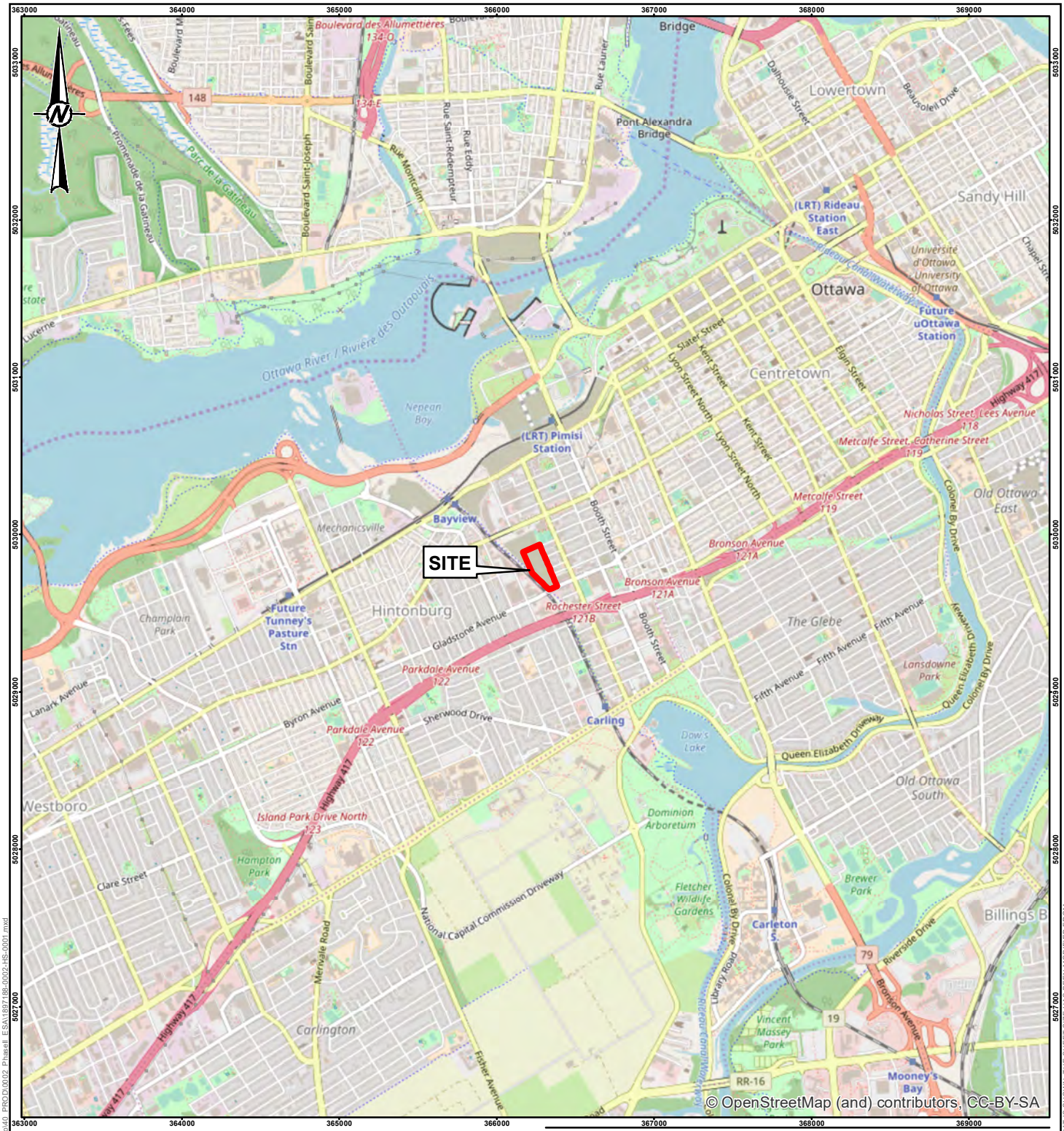
No volatile compounds exceeding MOECC Table 3 Standards were identified in soil or groundwater at the Site. As such, vapour intrusion was not investigated as part of this Phase Two ESA as it is not considered to be a concern for the Site.

Contaminant Transport and Exposure

Given that the concentrations of the COCs in soil and groundwater were below the applicable MOECC Table 3 Standards and no impacts in soil or groundwater were identified there is no potential for contaminant transport and exposure at the Site.

APPENDIX A

Figures



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1:35,000 METRES

REFERENCE(S)
1. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
KEY PLAN

CONSULTANT
GOLDER

YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:
25mm
0

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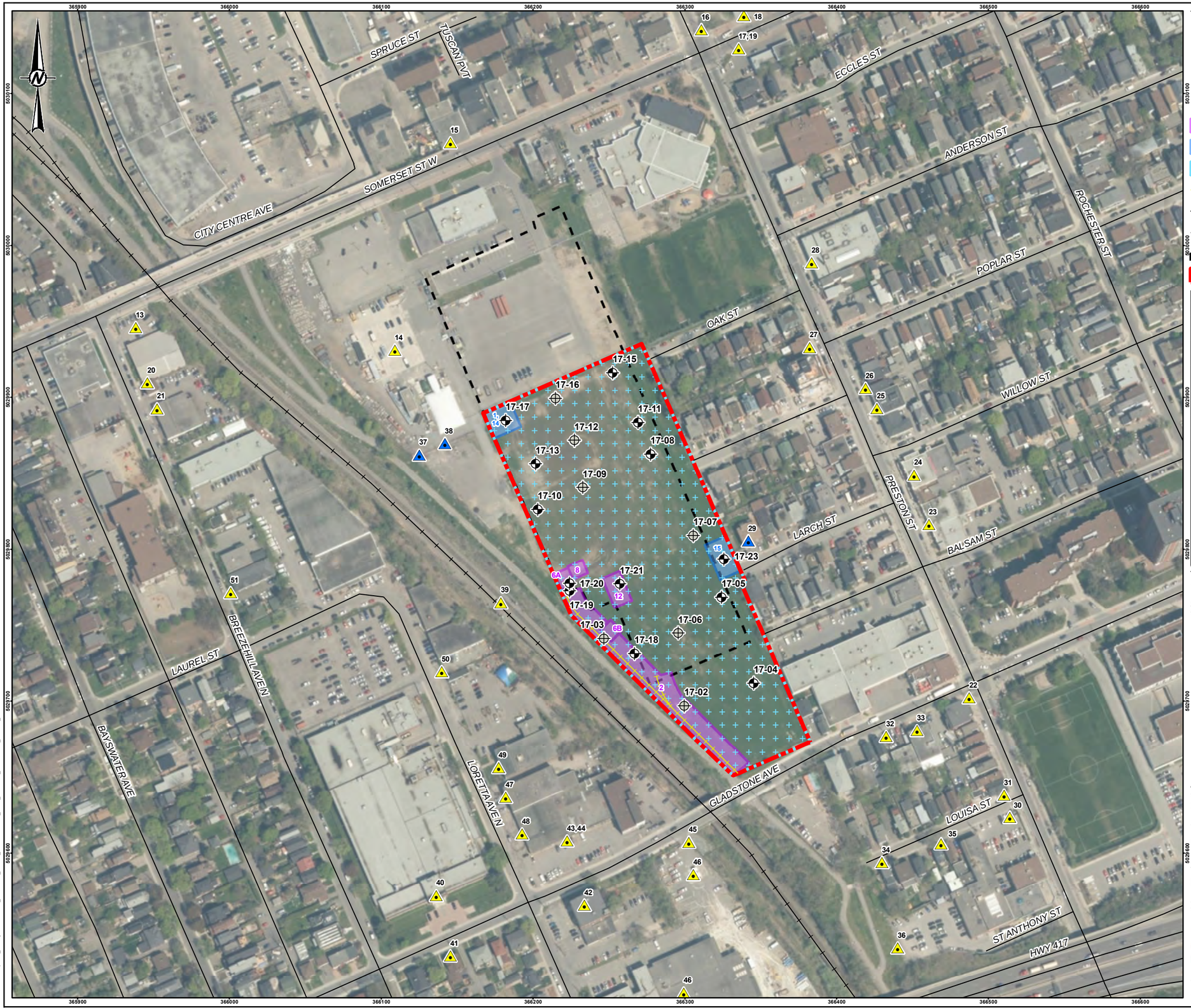

LEGEND

- APPROXIMATE BOREHOLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION
- POTENTIALLY CONTAMINATING ACTIVITY (PCA) NOT RESULTING IN APEC FOR THE SITE
- OFF-SITE POTENTIALLY CONTAMINATING ACTIVITY (PCA) RESULTING IN APEC FOR THE SITE
- AREA OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)
- APEC RESULTING FROM OFF-SITE PCA
- LOCATION OF APEC #3, 4, 5a, 5b, 5c, 7, 9, 10, 11, 13 (ENTIRE SITE)
- FORMER RAILWAY (APEC #2)
- ROADWAY
- RAILWAY
- FORMER WAREHOUSE BUILDING FOOTPRINT
- PHASE TWO SITE BOUNDARY

Area of potential environmental concern
APEC 1: Dyed Diesel AST
APEC 2: Former on-Site rail tracks as well as rail line adjacent to the west
APEC 3: Fill added following 2015 demolition. Layer of fill was also identified across Site prior to demolition, which included waste products. Fill origin unknown
APEC 4: Former lumber yard on-Site.
APEC 5a, 5b, 5c: Site used as Central Ordnance Depot for 50 years including storage of (a) oils, (b) munitions and assorted military stores and (c) paints
APEC 6a , 6b: Historical heating oil ASTs
APEC 7: Former printer operation on-Site
APEC 8: Former 2500 gallon sump noted in building plans for the flammables storage
APEC 9: Historical vehicle maintenance
APEC 10: Transformers on-Site within former warehouse
APEC 11: Waste generator codes for petroleum distillates, waste oils and lubricants, light
APEC 12: Several 205 L drums of waste oil were stored in the boiler room and minor
APEC 13: Numerous fires in the 1950's burned down portions of the depot which may have released contaminants
APEC 14: Parking area contains empty bulk liquid totes of unknown sources, 5 buckets (25 L each) marked "Hydraulic Fluid – Must be disposed of" on wooden pallet in paved area , soil piles, asphalt pile, empty drums. Several drums of unknown contents noted in 2001 in maintenance yard immediately adjacent to north
APEC 15: Venice Iron Works and V Steel Works Limited

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

0 25 50 100
1:2,500 METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
SITE PLAN

CONSULTANT
GOLDER

YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	BR/JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	**2**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 0 25mm

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LEGEND

- APPROXIMATE BOREHOLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION
- FORMER RAILWAY (APEC #2)
- ROADWAY
- RAILWAY
- FORMER WAREHOUSE BUILDING FOOTPRINT
- PHASE TWO SITE BOUNDARY
- 9999 GROUNDWATER ELEVATION, mASL (APRIL 30, 2018)
- GROUNDWATER ELEVATION CONTOUR, mASL
- INTERPRETED GROUNDWATER FLOW DIRECTION
- A A' CROSS-SECTION LOCATION

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. BING IMAGERY SUPPLIED BY ESRI AND MICROSOFT © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

0 15 30 60
1:1,500 METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
GROUNDWATER ELEVATIONS AND INTERPRETED GROUNDWATER FLOW DIRECTION

CONSULTANT
GOLDER

YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	BR/JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-17 SA3 (2.29 - 3.05)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None* (Naturally occurring vanadium)

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-16 SA1 (0 - 0.61)	25/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-15 SA2 (1.52 - 2.29)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-11 SA1 (0 - 0.63)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-12 SA3 (1.52 - 2.44)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-08 SA4 (3.05 - 3.81)	27/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None* (Naturally occurring vanadium)

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-13 SA4 (3.05 - 3.18)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None* (Naturally occurring vanadium)

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-09 SA3 (1.52 - 2.44)	26/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-10 SA6 (4.57 - 5.18)	27/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-20 SA1 (0 - 0.91)	27/01/2017	VOCs, PHCs, and BTEX.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-23 SA2 (1.52 - 2.29)	30/01/2017	Metals, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-19 SA2 (1.52 - 1.83)	27/01/2017	PAHs, PHCs, and BTEX.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-07 SA3 (1.52 - 2.44)	30/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None* (Naturally occurring vanadium)

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-21 SA2 (1.52 - 2.29)	27/01/2017	PHC and BTEX.	None
DUP 2 (1.52 - 2.29)	27/01/2017	PHC and BTEX.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-05 SA5 (3.81 - 4.57)	30/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-03 SA3 (1.52 - 2.44)	27/01/2017	Metals, PAHs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-18 SA2 (1.52 - 2.33)	30/01/2017	PAHs, PHCs, and BTEX.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-04 SA4 (3.05 - 3.81)	30/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None
DUP 3 (3.05 - 3.81)	30/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-02 SA1 (0 - 0.63)	30/01/2017	Metals, PAHs, and PHCs.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances [1]
17-06 SA3 (1.52 - 2.44)	27/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None

LEGEND

- APPROXIMATE BOREHOLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION
- FORMER RAILWAY (APEC #2)
- ROADWAY
- RAILWAY
- FORMER WAREHOUSE BUILDING FOOTPRINT
- PHASE TWO SITE BOUNDARY

NOTE(S)

1. [1] SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
2. NONE = NOT DETECTED ABOVE METHOD DETECTION LIMIT AND/ OR DOES NOT EXCEED MOE TABLE 3 STANDARDS
3. N/A - NOT APPLICABLE
4. * VANADIUM EXCEEDANCES ARE CONSIDERED TO BE RELATED TO NATURALLY OCCURING ELEVATED BACKGROUND CONCENTRATIONS IN THE SOIL

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. BING IMAGERY SUPPLIED BY ESRI AND MICROSOFT © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

0 15 30 60
1:1,500 METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
SOIL EXCEEDANCES

CONSULTANT
GOLDER

YYYY-MM-DD	2018-08-15
DESIGNED	----
PREPARED	BR/JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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366100 366200 366300 366400

5029900 5029800 5029700

OAK ST
POPLAR ST
WILLOW ST
LARCH ST
BALSAM ST
GLADSTONE AVE
LOUISA ST
BREEZEHILL AVE N

17-15 17-16 17-17 17-11 17-12 17-13 17-08 17-09 17-10 17-07 17-23 17-20 17-21 17-19 17-05 17-03 17-06 17-18 17-04 17-02

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-17	02/02/2017	PHCs, VOCs, PCBs, PAHs, and Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-15	23/08/2018	Metals, PAH, VOC	None

Groundwater Sample ID	Analytical Paramaters
17-11	Dry - Not Sampled

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-13	06/02/2017	PHCs, VOCs, PCBs, PAHs, and Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-08	23/08/2018	Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-10	06/02/2017	PHCs, VOCs, PCBs, PAHs, and Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-23	07/02/2017	PHCs, VOCs, and Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-20	06/02/2017	PHCs, BTEX, and VOCs	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-19	02/02/2017	PHCs, PAHs, and BTEX	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-05	07/02/2017	PHCs, VOCs, PCBs, PAHs, and Metals	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-21	07/02/2017	PHCs and BTEX	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-18	07/02/2017	PHCs, PAHs and BTEX	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-04	07/02/2017	PHCs, VOCs, PCBs, PAHs, and Metals	None

LEGEND

- APPROXIMATE BOREHOLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION
- FORMER RAILWAY (APEC #2)
- ROADWAY
- RAILWAY
- FORMER WAREHOUSE BUILDING FOOTPRINT
- PHASE TWO SITE BOUNDARY

NOTE(S)

1. (1) SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
2. NONE = NOT DETECTED ABOVE METHOD DETECTION LIMIT AND/ OR DOES NOT EXCEED MOE TABLE 3 STANDARDS
3. N/A - NOT APPLICABLE
4. * VANADIUM EXCEEDANCES ARE CONSIDERED TO BE RELATED TO NATURALLY OCCURING ELEVATED BACKGROUND CONCENTRATIONS IN THE SOIL

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. BING IMAGERY SUPPLIED BY ESRI AND MICROSOFT © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

0 15 30 60
1:1,500 METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
GROUNDWATER EXCEEDANCES

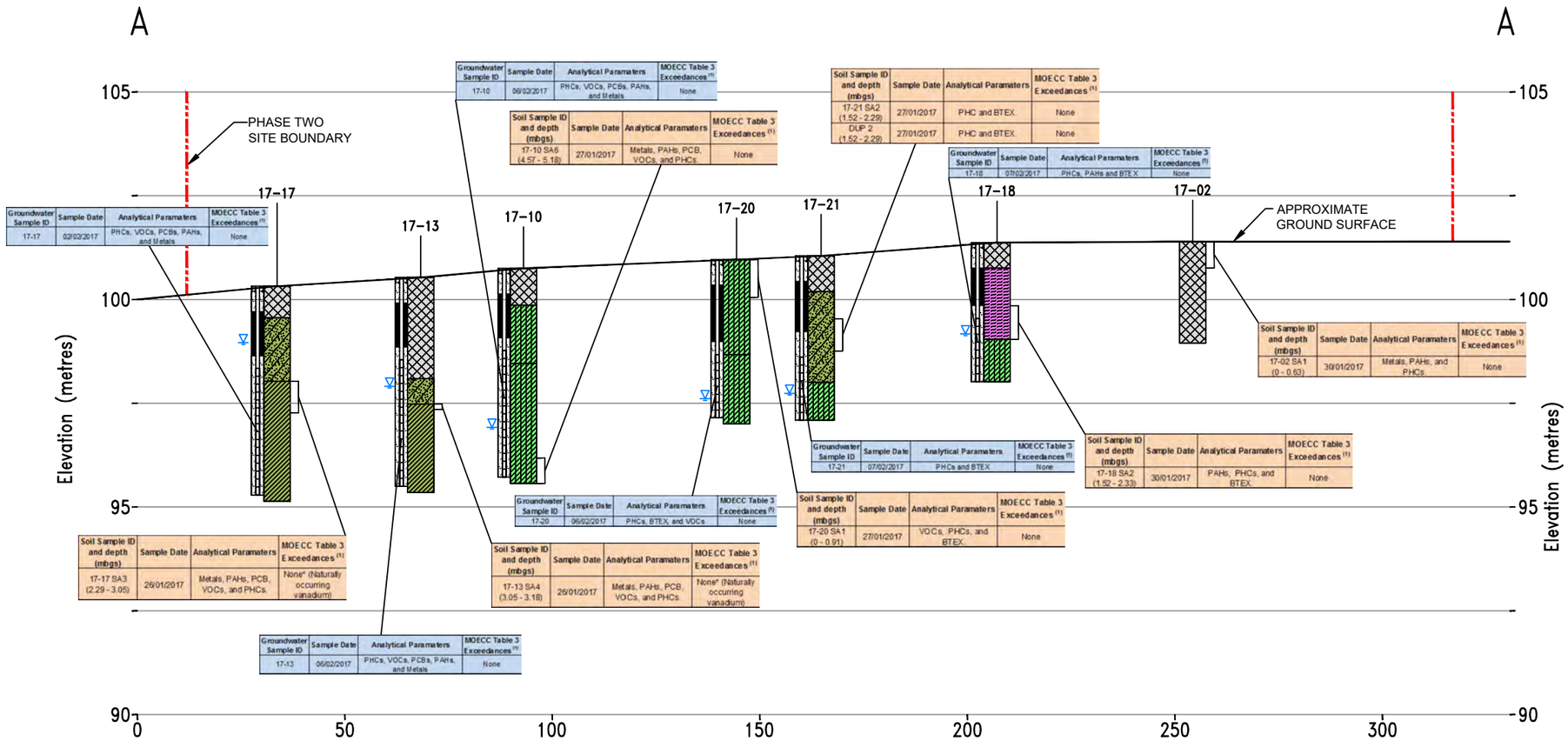
CONSULTANT
GOLDER

YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	BR/JEM
REVIEWED	AW
APPROVED	EDW

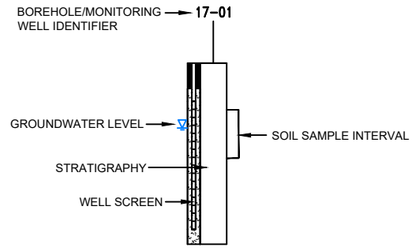
PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:
0 25mm

Path: N:\Active\Spatial_IM\City\Ottawa\933_Gladstone_Ave\99_PROJ\1897188_CofO_Enviro\40_PROD\0002_Phase\I_ESA\189718 8-0002-HS-0005.mxd



LEGEND

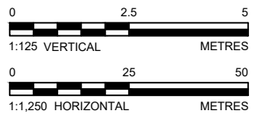


STRATIGRAPHY LEGEND

- FILL
- ASPHALTIC CONCRETE
- SANDY CLAY
- SILTY CLAY
- PEAT/ORGANICS
- SILTY SAND
- CLAY

NOTE(S)

1. (1)SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
2. NONE = NOT DETECTED ABOVE METHOD DETECTION LIMIT AND/ OR DOES NOT EXCEED MOE TABLE 3 STANDARDS
3. N/A - NOT APPLICABLE
4. * VANADIUM EXCEEDANCES ARE CONSIDERED TO BE RELATED TO NATURALLY OCCURING ELEVATED BACKGROUND CONCENTRATIONS IN THE SOIL



CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
CROSS-SECTION A-A' WITH SOIL AND GROUNDWATER EXCEEDANCES

CONSULTANT
GOLDER

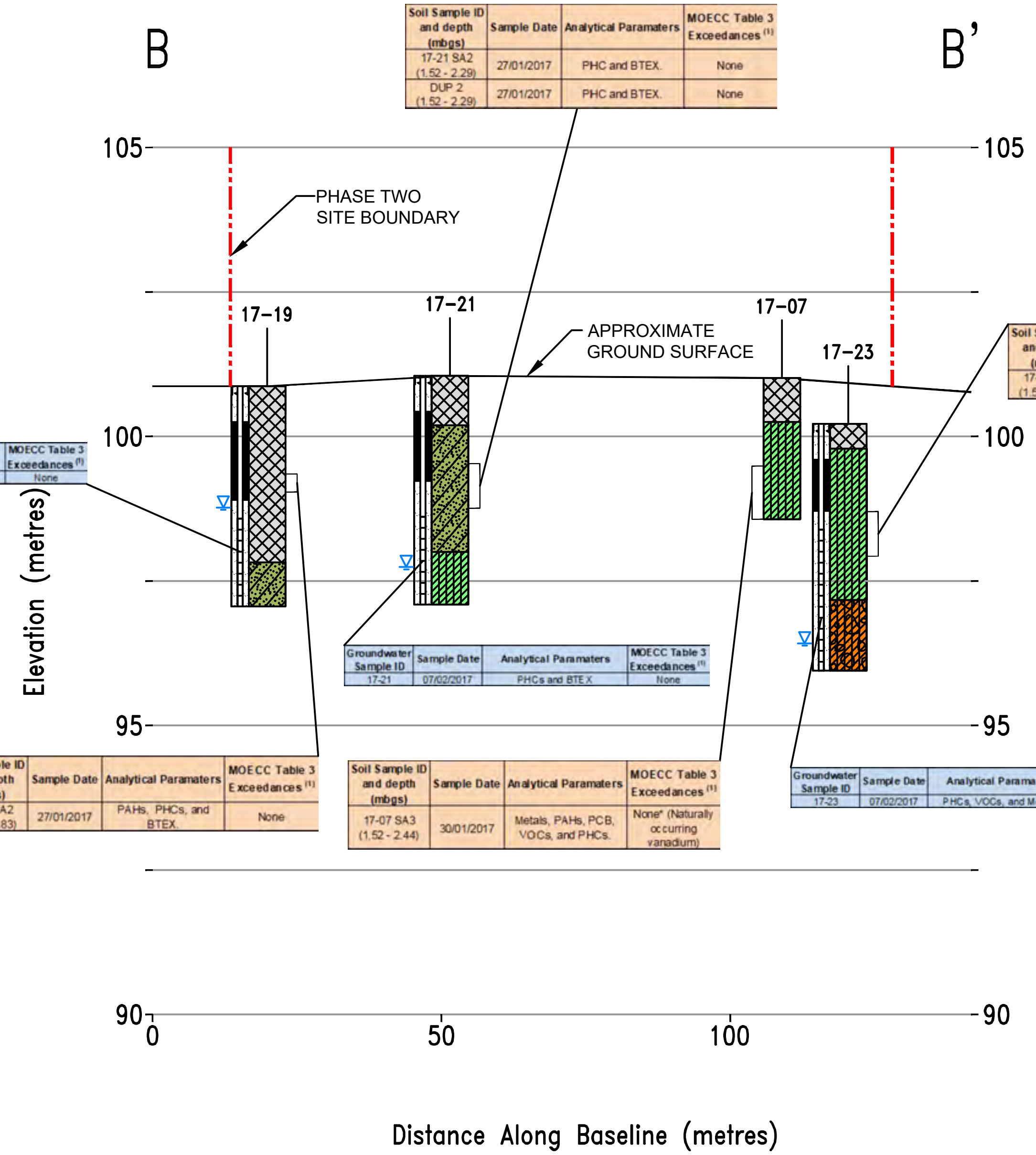
YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	6

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25 mm

Path: \\golder.gds\gal\ottawa\Active\Spatial_IM\City\ofOttawa\933_Gladstone_Ave\99_PROJ\1897188_CofO_Enviro\40_PROD\0002_PhaseII_ESA\ | File Name: 1897188-0002-HS-0006.dwg



Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-21 SA2 (1.52 - 2.29)	27/01/2017	PHC and BTEX.	None
DUP 2 (1.52 - 2.29)	27/01/2017	PHC and BTEX.	None

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-19	02/02/2017	PHCs, PAHs, and BTEX	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-23 SA2 (1.52 - 2.29)	30/01/2017	Metals, VOCs, and PHCs.	None

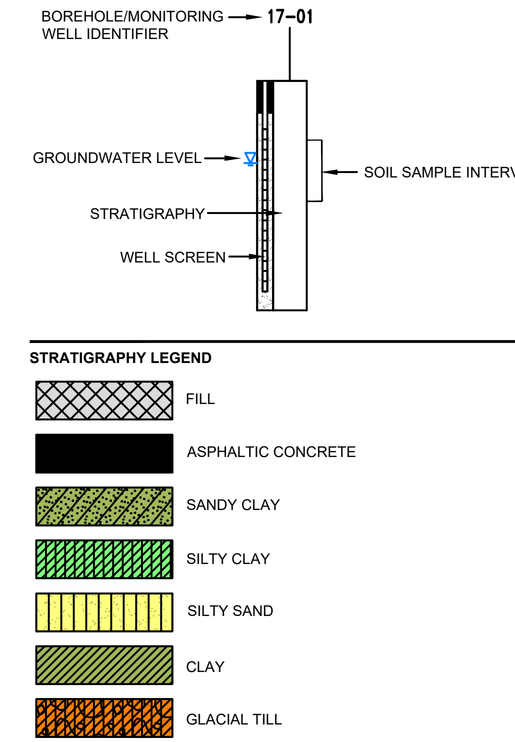
Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-21	07/02/2017	PHCs and BTEX	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-19 SA2 (1.52 - 1.83)	27/01/2017	PAHs, PHCs, and BTEX.	None

Soil Sample ID and depth (mbgs)	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-07 SA3 (1.52 - 2.44)	30/01/2017	Metals, PAHs, PCB, VOCs, and PHCs.	None* (Naturally occurring vanadium)

Groundwater Sample ID	Sample Date	Analytical Paramaters	MOECC Table 3 Exceedances (1)
17-23	07/02/2017	PHCs, VOCs, and Metals	None

LEGEND



NOTE(S)

1. (1)SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
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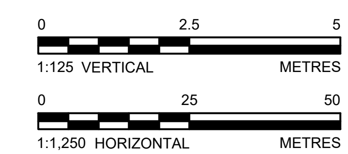
3. N/A - NOT APPLICABLE
4. * VANADIUM EXCEEDANCES ARE CONSIDERED TO BE RELATED TO NATURALLY OCCURING ELEVATED BACKGROUND CONCENTRATIONS IN THE SOIL



CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
CROSS-SECTION B-B' WITH SOIL AND GROUNDWATER EXCEEDANCES

CONSULTANT

GOLDER

YYYY-MM-DD	2018-08-10
DESIGNED	----
PREPARED	JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	7

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-16 SA1 (0 - 0.61)	25/01/2017	86	45

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-15 SA2 (1.52 - 2.29)	26/01/2017	86	85

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-17 SA3 (2.29 - 3.05)	26/01/2017	86	92*

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-11 SA10 (0 - 0.63)	26/01/2017	86	56

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-12 SA3 (1.52 - 2.44)	26/01/2017	86	37

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-13 SA4 (3.05 - 3.18)	26/01/2017	86	94*

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-08 SA4 (3.05 - 3.81)	27/01/2017	86	87*

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-09 SA3 (1.52 - 2.44)	26/01/2017	86	41

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-10 SA6 (4.57 - 5.18)	27/01/2017	86	58

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-23 SA2 (1.52 - 2.29)	30/01/2017	86	63

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-07 SA3 (1.52 - 2.44)	30/01/2017	86	93*

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-05 SA5 (3.81 - 4.57)	30/01/2017	86	20

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-03 SA3 (1.52 - 2.44)	27/01/2017	86	75

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-04 SA4 (3.05 - 3.81)	30/01/2017	86	17
DUP 3 (3.05 - 3.81)	30/01/2017	86	17

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-02 SA1 (0 - 0.63)	30/01/2017	86	28

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-06 SA3 (1.52 - 2.44)	27/01/2017	86	68

LEGEND

- APPROXIMATE BOREHOLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION
- FORMER RAILWAY (APEC #2)
- ROADWAY
- RAILWAY
- FORMER WAREHOUSE BUILDING FOOTPRINT
- PHASE TWO SITE BOUNDARY

NOTE(S)

1. [1] SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
2. * VANADIUM EXCEEDANCES ARE CONSIDERED TO BE RELATED TO NATURALLY OCCURING ELEVATED BACKGROUND CONCENTRATIONS IN THE SOIL

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. BING IMAGERY SUPPLIED BY ESRI AND MICROSOFT © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

0 15 30 60
1:1,500 METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
VANADIUM CONCENTRATIONS IN SOIL

CONSULTANT
GOLDER

YYYY-MM-DD	2019-10-04
DESIGNED	----
PREPARED	BR/JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	8

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:
25mm
0

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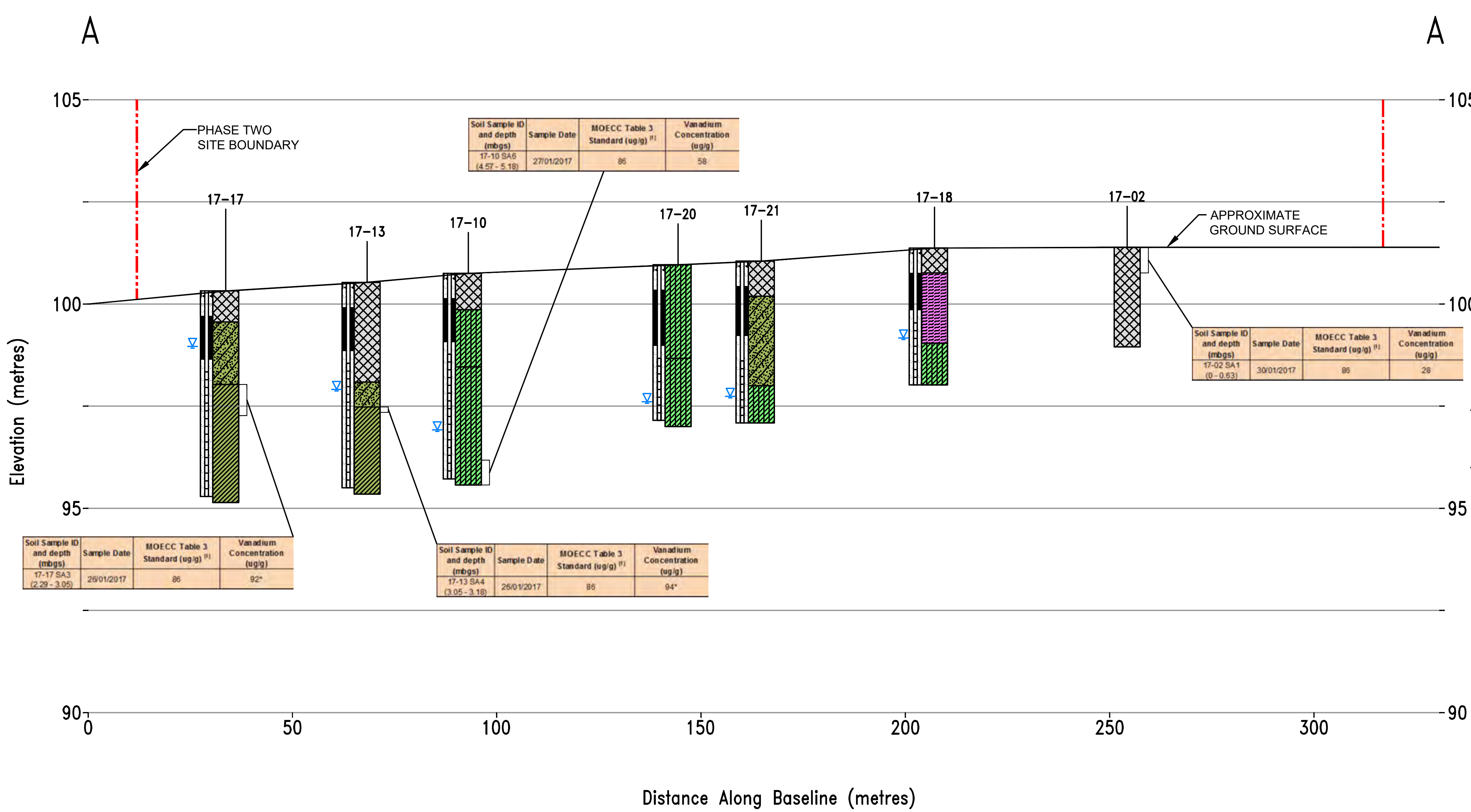


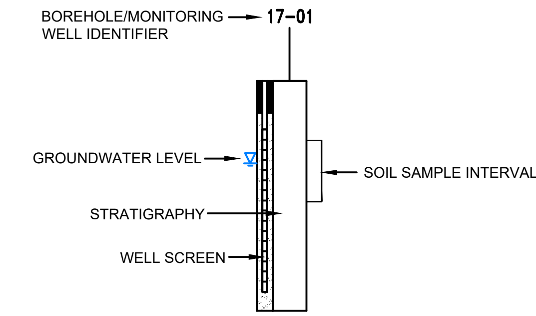
Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) (1)	Vanadium Concentration (ug/g)
17-10 SA6 (4.57 - 5.18)	27/01/2017	86	58

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) (1)	Vanadium Concentration (ug/g)
17-02 SA1 (0 - 0.63)	30/01/2017	86	28

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) (1)	Vanadium Concentration (ug/g)
17-17 SA3 (2.29 - 3.05)	26/01/2017	86	92*

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) (1)	Vanadium Concentration (ug/g)
17-13 SA4 (3.05 - 3.18)	26/01/2017	86	94*

LEGEND



STRATIGRAPHY LEGEND

- FILL
- ASPHALTIC CONCRETE
- SANDY CLAY
- SILTY CLAY
- PEAT/ORGANICS
- SILTY SAND
- CLAY

NOTE(S)

1. (1)SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
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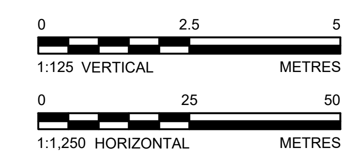


CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

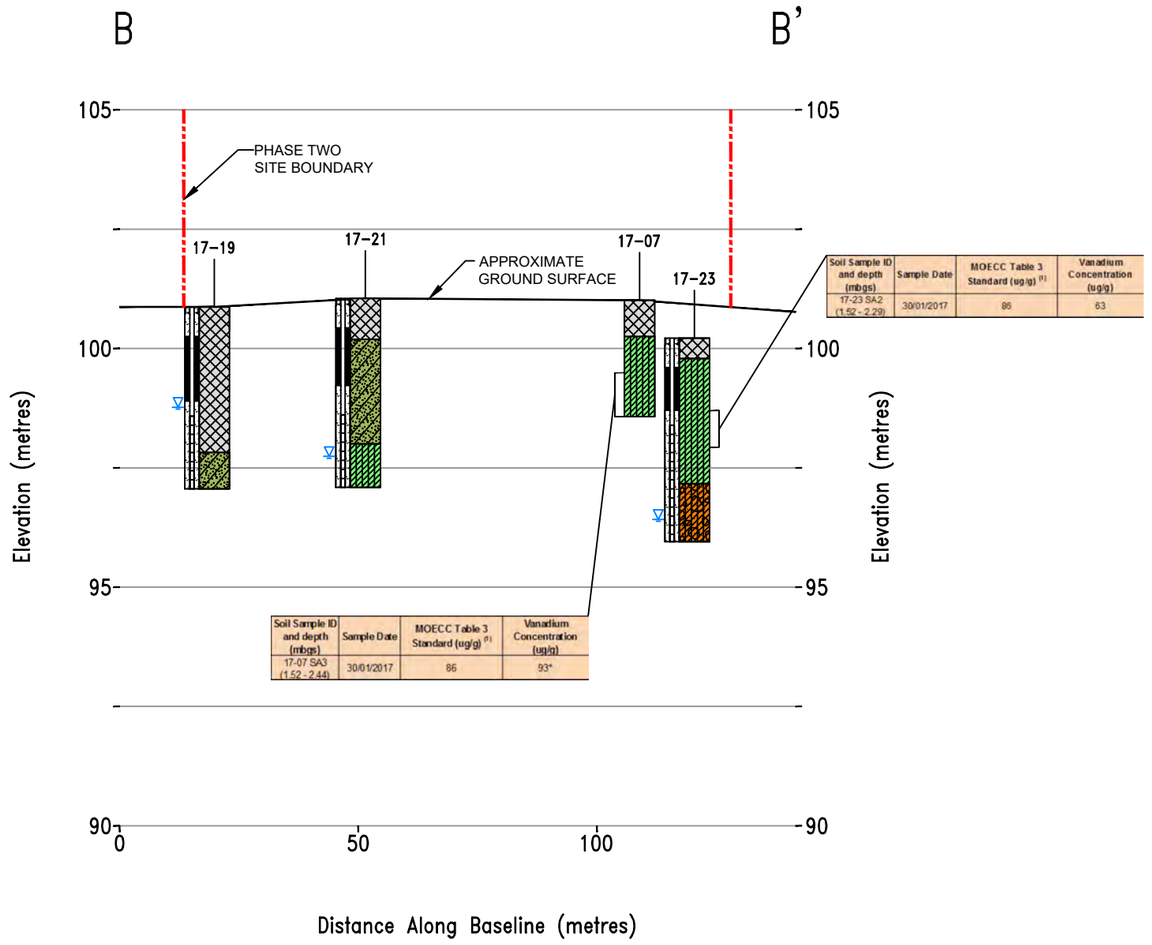
TITLE
CROSS-SECTION A-A' WITH VANADIUM CONCENTRATIONS IN SOIL

CONSULTANT

GOLDER

YYYY-MM-DD	2019-10-04
DESIGNED	----
PREPARED	JEM
REVIEWED	AW
APPROVED	EDW

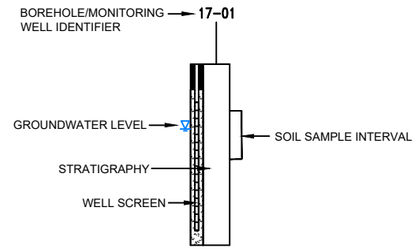
PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	9



Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-23 SA2 (1.52 - 2.29)	30/01/2017	86	63

Soil Sample ID and depth (mbgs)	Sample Date	MOECC Table 3 Standard (ug/g) [1]	Vanadium Concentration (ug/g)
17-07 SA3 (1.52 - 2.44)	30/01/2017	86	93*

LEGEND



STRATIGRAPHY LEGEND

- FILL
- ASPHALTIC CONCRETE
- SANDY CLAY
- SILTY CLAY
- SILTY SAND
- CLAY
- GLACIAL TILL

NOTE(S)

1. (1)SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT, TABLE 3 FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A NON-POTABLE GROUND WATER CONDITION, RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE, COARSE-TEXTURED SOIL, APRIL 15, 2011 (MOECC TABLE 3 STANDARDS).
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0 2.5 5
1:125 VERTICAL METRES

0 25 50
1:1,250 HORIZONTAL METRES

CLIENT
OTTAWA COMMUNITY HOUSING CORPORATION

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE
933 GLADSTONE AVENUE, OTTAWA, ONTARIO

TITLE
CROSS-SECTION B-B' WITH VANADIUM CONCENTRATIONS IN SOIL

CONSULTANT
GOLDER

YYYY-MM-DD	2019-10-04
DESIGNED	----
PREPARED	JEM
REVIEWED	AW
APPROVED	EDW

PROJECT NO.	CONTROL	REV.	FIGURE
1897188	0002	0	10

golder.com

13 August 2019

Mr. Eric Wilson, P.Eng., PMP
Golder Associates Ltd.
1931 Robertson Road
Ottawa, Ontario
K2C 2L6

Dear Mr. Wilson,

Re: Record of Site Condition – 933 Gladstone Avenue

As per your email of August 2, 2019 requesting to use non-potable standards, this is to advise that the City of Ottawa does not object to the use of non-potable groundwater standards for the property identified as 933 Gladstone Avenue, Ottawa, ON, as part of the filing of a Record of Site Condition.

Best Regards,

Michel Kearney, P.Geo.

Senior Hydrogeologist
Asset Management
Planning, Infrastructure and Economic Development Department

Hydrogéologue principal
Gestion des actifs
Services de la planification, de l'infrastructure et du développement économique
City of Ottawa | Ville d'Ottawa

613.580.2424 ext./poste 22872
ottawa.ca/planning / ottawa.ca/urbanisme