October 18, 2016

Subject: **Phase Two Conceptual Site Model**
Part Lot 10, Concession 1, Beasley's Lower Block, being Parts 1, 2 and 3 on Plan 58R-17566, Subject to an Easement over Part 2 on Plan 58R-17566 as in B46505
City of Cambridge, Ontario
Our Ref.: 160-P-0001178-0-10-201-HG-L-0002-01_CSM_A

1. INTRODUCTION

The following document presents the Phase Two Conceptual Site Model for the property legally described as Part Lot 10, Concession 1, Beasley's Lower Block, being Parts 1, 2 and 3 on Plan 58R-17566, Subject to an Easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario (hereinafter referred to as the "RSC Property"). The RSC Property is part of a larger portion of the lands municipally known as 1065 Speedsville Road and commonly referred to as the "Arriscraft / Hunt Club Lands", which are approximately 122 hectares (ha) in total area and generally bordered by Speedsville Road to the west, Maple Grove Road to the north and the Speed River to the south. Phase One and Two Environmental Site Assessments (ESAs) were completed for the Arriscraft / Hunt Club Lands.

The RSC Property is located in the City of Cambridge as shown on the attached Location Plan, Drawing 1. Site identification information is presented below.

Table 1 RSC Property Identification Information

Property Identification Number (PIN)	03756-0349 (LT)
Universal Transverse Mercator (UTM) coordinates	Zone 17T 552620 Easting and 4808279 Northing
Site Area	32.8 hectares
Property Owner	Hunt Club Valley Inc.
Owner Contact	Mr. Ward Campbell
Owner Address	2000 Garth Street, Suite 201, Hamilton, Ontario L9B 0C1

The RSC Property is vacant land (no buildings or structures) and utilized for agricultural purposes. Based on historical records, the RSC Property was identified as an industrial waste site including sewage sludge between the years 1970 and 1975. The RSC Property was also reportedly used to quarry (excavate) unconsolidated aggregate (industrial purposes). Middle Creek traverses the RSC Property, flowing onto the RSC Property from the northwest, into a small pond located in the southeast, and eventually discharges to the Speed River located further south of the RSC Property. Wooded areas and provincially significant wetlands are found in several areas on the RSC Property, primarily along the creek banks. The ground surface across the RSC Property generally slopes southeastwards towards the Speed River. Post-aggregate extraction grading has created a relatively level topography north/west of Briardean Road. Local grades tend to descend towards Middle Creek, which in turn trends to the southeast.

The adjacent property to the north contains agricultural and/or woodland areas. The RSC Property is bordered to the east and south by Briardean Road, and residential properties and an aggregate extraction quarry located beyond. The RSC Property is bounded to the west by Speedsville Road and light industrial/commercial properties to the southwest.

The RSC Property and the surrounding properties are shown on the attached Site and Surrounding Land Use Plan, Drawing 2, attached.

2. POTENTIALLY CONTAMINATING ACTIVITIES AND AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

A Phase One ESA was completed for the Phase One Property, which encompases the RSC Property, in addition to lands located to the south and further east of the RSC Property. Based on the findings of the Phase One ESA, Potentially Contaminating Activities (PCAs) associated with the RSC Property and surrounding properties within the Phase One Study Area were identified. A summary of the PCAs contributing to Areas of Potential Environmental Concern (APECs) associated with the RSC Property were identified, as presented hereafter.

Table 2 PCAs and APECs (from Phase One ESA)

APEC	LOCATION OF APEC	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON-SITE OR OFF-SITE)	CONTAMINANTS OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED
APEC 1	Entire RSC Property	No. 40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing and Bulk Storage and Large-Scale Applications	On-Site	OCs	Soil
APEC 2	Western portion of the RSC Property	No. 30 – Importation of Fill Material of Unknown Quality	On-Site	PHCs, BTEX, VOCs and/or Metals	Soil
APEC 3	Southwestern portion of the Property	No. 10 – Commercial Autobody Shops	Off-Site	PHCs, BTEX, VOCs and/or Metals	Soil and/or Groundwater
APEC 4	Northwestern portion of the RSC Property	No. 58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than biosoils as soil conditioners	On-Site	PHCs, BTEX, VOCs, Metals, OCs, PAHs, PCBs, ABNs, CPs, Cl- / Cr (VI) / Cn- and/or Hg	Soil and/or Groundwater

The APECs associated with the PCAs are shown on the attached Site and Surrounding Land Use Plan, Drawing 2, attached.

2.1 UNDERGROUND UTILITIES

Reportedly, no underground utilities are present on the RSC Property. Electrical lines extend overhead on the western, southern and eastern property boundaries.

3. PHYSICAL SITE DESCRIPTION

3.1 STRATIGRAPHY

The RSC Property is located within the Physiographic Region of Southern Ontario known as the Guelph Drumlin Field (Chapman and Putnam, 2007). The primary physiographic landforms in this region are spillways. Based on Quaternary Geology mapping, the RSC Property area is characterized by Port Stanley Till and Glaciofluvial Outwash deposits. Port Stanley Till primarily consists of silt to sandy silt matrix while glaciofluvial outwash deposits consist of gravel and sand (includes pro-glacial river and deltaic deposits). Surficial Geology mapping provides that the area comprises generally of paleozoic bedrock, stone-poor, sandy silt to silty sand-textured till and sandy glaciofluvial deposits. Bedrock geology in the area of the RSC Property is predominantly sandstone, shale, dolostone and siltstone of the Guelph Formation. Based on bedrock mapping, bedrock is generally at depths of approximately 25 mbgs.

A summary of the soil stratigraphy and encountered depths is summarized in the table below.

Table 3 Soil Stratigraphy and Encountered Depths

BOREHOLE LOCATION	SOIL STRATIGRAPHY	APPROXIMATE ELEVATION (mASL)	APPROXIMATE DEPTH (mbg)
BH-03-15	Fill – silt, sand and gravel Silt Sand Silt	(315.18 – 310.84) (310.84 – 310.15) (310.15 – 305.12) (305.12 – 304.82)	(0 – 4.34) (4.34 – 5.03) (5.03 – 10.06) (10.06 – 10.36)
BH-04-15	Fill – silt, sand and gravel Sand Silt	(315.65 – 311.69) (311.69 – 307.27) (307.27 – 304.07)	(0 – 3.81) (3.81 – 8.38) (8.38 – 11.58)
BH-06-15	Fill - sand and gravel Sand	(309.80 – 309.24) (309.24 – 308.58)	(0 – 0.56) (0.56 – 1.22)
BH-07A-15	Fill – sand and gravel Sand	(308.36 – 307.45) (307.45 – 307.14)	(0 – 0.91) (0.91 – 1.22)
BH-07B-15	Fill – sand Sand	(307.73 – 306.97) (306.97 – 306.51)	(0 – 0.58) (0.58 – 1.22)
BH-08-15	Fill – sand	(307.70 – 307.55)	(0 – 0.15)

BOREHOLE LOCATION	SOIL STRATIGRAPHY	APPROXIMATE ELEVATION (mASL)	APPROXIMATE DEPTH (mbg)
	Sand	(307.55 – 306.48)	(0.15 – 1.22)
BH-09-15	Sand	(307.24 – 306.02)	(0 – 1.22)
BH-10-15	Fill – silt Sand	(307.36 – 307.18) (307.18 – 306.14)	(0 – 0.18) (0.18 – 1.22)
BH-11-15	Fill – sand Sand	(307.11 – 306.65) (306.65 – 305.89)	(0 – 0.46) (0.46 – 1.22)
BH-12-15	Topsoil Sand	(309.57 – 309.32) (309.32 – 308.35)	(0 – 0.25) (0.25 – 1.22)
BH-13-15	Topsoil Sand	(305.62 – 304.93) (304.93 – 304.40)	(0 – 0.69) (0.69 – 1.22)
BH-101-15	Topsoil Sand	(307.44 – 306.68) (306.68 – 302.41)	(0 – 0.76) (0.76 – 5.03)
BH-102-15	Topsoil Sand Silt Sand Sand and Gravel	(306.99 – 306.84) (306.84 – 304.09) (304.09 – 303.18) (303.18 – 302.42) (302.42 – 310.81)	(0 – 0.15) (0.15 – 2.90) (2.90 – 3.81) (3.81 – 4.57) (4.57 – 5.18)
BH-103-15	Fill – Silt and Sand Silt	(307.51 – 305.53) (305.53 – 302.33)	(0 – 1.98) (1.98 – 5.18)

3.2 HYDROGEOLOGY

A summary of the hydrogeological characteristics of the RSC Property is provided in the table below.

Table 4 Hydrogeological Characteristics

DESCRIPTION	HYDROGEOLOGICAL CHARACTERISTIC
Approximate depth to groundwater	1.07 to 8.91 mbg (305.77 to 306.85 m AMSL)
Stratigraphy at Groundwater Table	Sand and Silt
Direction of Groundwater Flow	Southeasterly
Horizontal Hydraulic Gradient	Average 0.0025 (minimum 0.0003 and maximum 0.0099)
Vertical Hydraulic Gradient	Not calculated during this investigation

Groundwater elevations and interpreted groundwater contours collected during an Englobe hydrogeology investigation are show on the Groundwater Elevations and Interpreted Groundwater Contour Plan Drawing 3, attached.

3.3 SOIL PLACED ON, IN OR UNDER THE PHASE TWO PROPERTY

Based on the results of the subsurface investigations, fill materials were encountered in boreholes. The depth of the fill material encountered in the boreholes varied between approximately 0.2 and 4.4 mbg. Fill primarily consisted of silt, sand and gravel. Based on historical records, the RSC Property was identified as an industrial waste site including sewage sludge between the years 1970 and 1975 (APEC 4).

3.4 PROPOSED BUILDINGS

The RSC Property is vacant land (no buildings or structures) and utilized for agricultural purposes. Englobe understands that the Phase Two Property, including the RSC Property, is proposed to be developed for future residential use. The proposed development plan for the RSC Property is unknown at this time.

4. APPLICABLE SITE CONDITION STANDARDS

The soil and groundwater analytical results were compared to Standards presented in the Ontario Ministry of the Environment and Climate Change (MOECC) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, O. Reg. 153/04, as amended (hereafter referred to as "O. Reg. 153/04 Standards"). The soil analytical results were compared to residential/ parkland/ institutional/ industrial/ commercial/ community property use standards as defined in Table 1 of the O. Reg. 153/04 Standards (hereinafter referred to as the MOECC Table 1 Standards). The groundwater analytical results were compared to the All Types of Property Use Standards provided within the MOECC Table 1 Standards.

The rationale for the selection of the site condition standards chosen is provided below:

Table 5 Site Condition Standards Selection

DESCRIPTION	SITE SPECIFIC STANDARDS SELECTION RATIONALE
Sections 41 and 43.1 of O.Reg. 153/04 - Site Sensitivity	Sections 41 and 43.1 of O. Reg. 153/04, as amended, would apply to the Site based on the following: • Several water bodies, streams, ponds and/or wetland areas were observed on the RSC Property. The nearest major water body is the Speed River, which is located approximately 960 m to the south of the RSC Property. • The Ontario Ministry of Natural Resources and Forestry (MNRF) reported that no earth sciences or life science Areas of Natural Scientific Interest (ANSIs) were identified on the Site or lands adjacent to the Site; however, the Speed River Provincially Significant Wetlands Complex is located within the study area. • Based on a review of the Regional Municipality of Waterloo Official Plan, Map No. 4 – Greenlands Network, no significant valleys or environmental sensitive landscapes are shown on the RSC Property or on the surrounding properties. However, core environmental features (CEFs) are shown on the RSC Property and adjacent properties. CEFs include: provincially significant wetlands; environmentally sensitive policy areas; regional forests; forests greater than 4 ha; and significant valley features.
Soil Texture	Based on field observations, the dominant soil type is primarily comprised of coarse textured soils.

DESCRIPTION	SITE SPECIFIC STANDARDS SELECTION RATIONALE
Land Use	The RSC Property is currently being used for agricultural use. The Site was historically utilized for industrial purposes (i.e. quarrying to excavate unconsolidated aggregate). Future redevelopment of the Site for residential purposes has been proposed.
Groundwater	The RSC Property is located within the City of Cambridge, which relies on groundwater as a potable water source.

5. CONTAMINATION ON, IN OR UNDER THE PHASE TWO PROPERTY

A summary of the environmental investigative locations is presented on the Borehole and Monitoring Well Location Plan, Drawing 4, attached. Based on the Phase Two ESA carried out at the RSC Property, there are currently no contaminants present at the RSC Property, as summarized below:

Table 6 Potentially Impacted Areas

MEDIA	COMMENT
Fill Materials	No contaminants present in the fill materials in the areas where sampled.
Native Soils	No contaminants present in the native soils in the areas where sampled.
Bedrock	Based on the information obtained in the Phase One ESA, no contamination in the bedrock is expected.
Groundwater	No contaminants present in the groundwater in the areas where sampled.

5.1 CONTAMINANTS ASSOCIATED WITH EACH AREA

The contaminants of concern (COCs) associated with the APECs identified at the Site were assessed for select chemical analyses, including Petroleum Hydrocarbon Fractions (PHC) F1–F4, Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), Volatile Organic Compounds (VOCs), Metals and Inorganics, Polycyclic Aromatic Hydrocarbons (PAHs), Acid/Base/Neutral Compounds (ABNs), Polychlorinated Biphenyls (PCBs) and/or Organochlorine Pesticides (OCs).

Based on the results of the Phase Two ESA, the concentrations of all analyzed parameters in the soil and groundwater samples collected from the Site (within the APECs) were non-detectable or were below their applicable MOECC Table 1 Standards.

5.2 MEDIUM IN WHICH CONTAMINANTS ARE ASSOCIATED

Not Applicable

5.3 INFORMATION KNOWN ABOUT EACH CONTAMINATED AREA

Not Applicable

5.4 DISTRIBUTION OF CONTAMINANT/SOURCE OF CONTAMINANT DISCHARGE

Not Applicable

5.5 MIGRATION OF CONTAMINANT

Not Applicable

5.6 CLIMATIC OR METEOROLOGICAL INFLUENCES ON MIGRATION

Not Applicable

5.7 SOIL VAPOUR INTRUSION INTO BUILDINGS

Not Applicable

5.8 POTENTIAL EXPOSURE PATHWAYS AND RECEPTORS

Geological Cross Sections A-A' and B-B' summarizing the current RSC Property conditions are shown on Drawings 5 and 6, attached. The potential sources, pathways and receptors of detected contaminants present on the RSC Property are summarized hereafter:

Table 7 Human Health Risk Summary

SOURCE	CONTAMINANT OF CONCERN	POTENTIAL PATHWAY	POTENTIAL RISKS
Fill	None	Ingestion	No Source → No Risk
		Inhalation	
		Skin Contact	
Native Soils	None	Ingestion	No Source → No Risk
		Inhalation	
		Skin Contact	
Bedrock	None	Ingestion	No Source → No Risk
		Inhalation	
		Skin Contact	
Groundwater	None	Ingestion	No Source → No Risk
		Skin Contact	

Table 8 Terrestrial Environment

SOURCE	CONTAMINANT OF CONCERN	POTENTIAL PATHWAY	POTENTIAL RISKS
Fill	None	Ingestion	No Source → No Risk
		Inhalation	
		Skin Contact	
		Root Uptake	

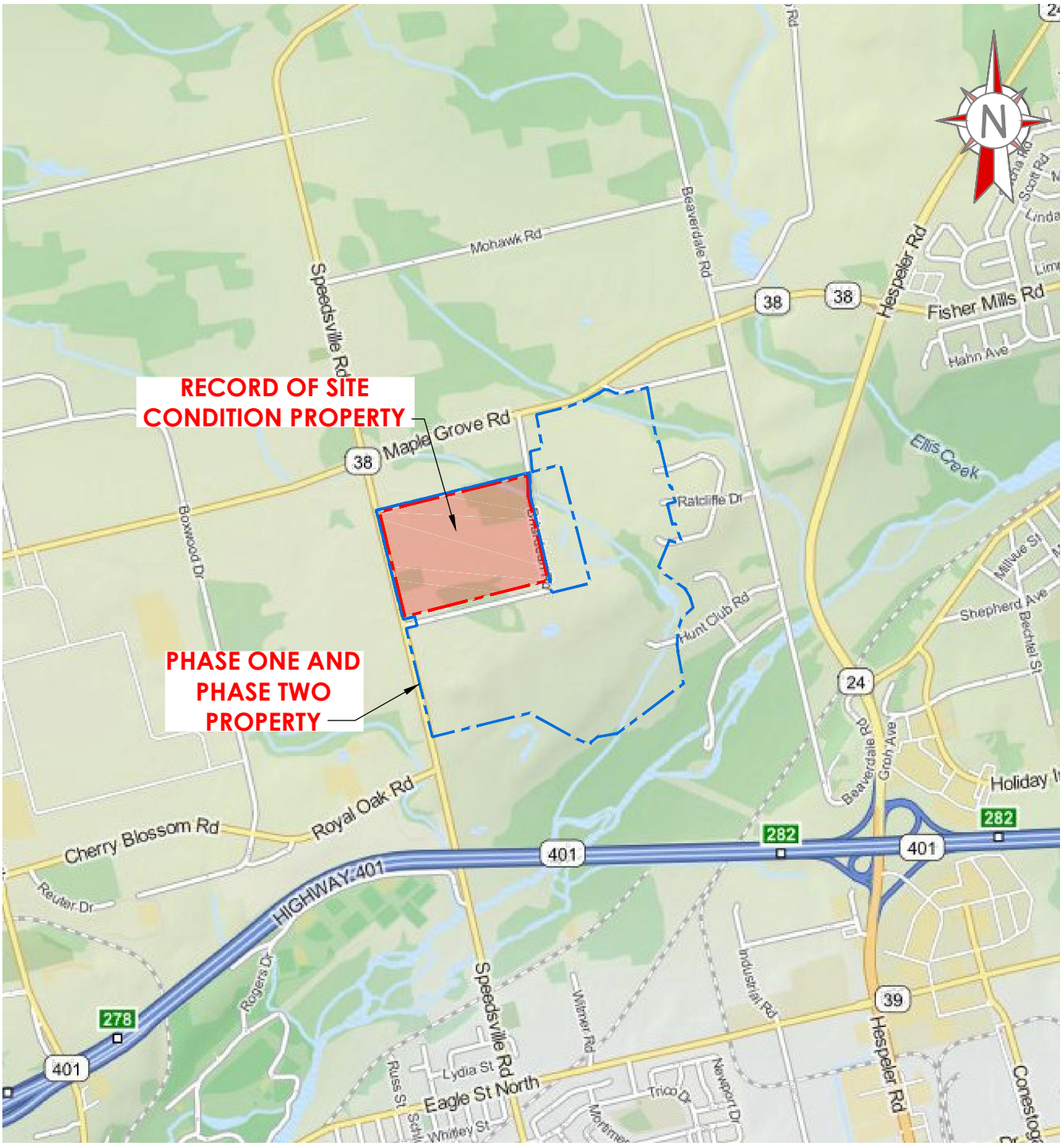
SOURCE	CONTAMINANT OF CONCERN	POTENTIAL PATHWAY	POTENTIAL RISKS
Native Soils	None	Ingestion	No Source → No Risk
		Inhalation	
		Prey/Food Uptake	
Bedrock	None	Ingestion	No Source → No Risk
		Inhalation	
		Skin Contact	
Groundwater	None	Ingestion	No Source → No Risk
		Root Uptake	

Table 9 Aquatic Environment

SOURCE	CONTAMINANT OF CONCERN	POTENTIAL PATHWAY	POTENTIAL RISKS
Groundwater	None	Gill Uptake	No source / No Aquatic Ecosystem → No Risk
		Ingestion	No source / No Aquatic Ecosystem → No Risk
		Prey/Food Uptake	No source / No Aquatic Ecosystem → No Risk

Attachments: Drawings

AD/alc



NOTES :
1-REFERENCES : © OpenStreetMap contributors (2013).

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Project

Conceptual Site Model

Part Lot 10, Concession 1, Beasley's Lower Block, Being Parts 1, 2 and 3 on Plan 58R17566, subject to an easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario

Title

LOCATION PLAN

Englobe
353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	K. Ashe	Discipline	ENVIRONMENTAL	Project manager	A. Dunbrack
Drawn	K. Ashe	Scale	1 : 25000	Sequence no.	01 of 06
Checked	A.Dunbrack	Date	2016-07-04		

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	001	01

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AGRICULTURAL

AGRICULTURAL

AGRICULTURAL

RESIDENTIAL

#2240

#2125

#2165

MAPLE GROVE ROAD

SPEEDSVILLE ROAD

MAPLE GROVE ROAD

#815

#875

RESIDENTIAL

AGRICULTURAL

WANNER MENNONITE CHURCH

RESIDENTIAL

BEAVERDALE ROAD

BURNHAM ROAD

HEROUX DEVTEK DRIVE

BRIARDEAN ROAD

RESIDENTIAL

RATCLIFFE DRIVE

#1310

#1240

#1285

RESIDENTIAL/ THE BATTERY SHOP (PCA)

SCRAP YARD (PCA)

AUTOMOTIVE SERVICE AND REPAIR FACILITY (PCA)

BRIARDEAN ROAD

STAR CRESCENT

RESIDENTIAL

VACANT

RESIDENTIAL

GILL COVE

#1065 AGGREGATE EXTRACTION (PCA)

PROPOSED SITE DEVELOPMENT PLAN

CASSELMAN'S WELDING AND FABRICATION (PCA)

#1000

HUNT CLUB ROAD

LISAARD HOUSE

TRADE MARK (PCA)

#875 ARRISCRAFT (PCA)

RESIDENTIAL

#250

ROYAL OAK ROAD

RAIL WAY

250 m PHASE ONE STUDY AREA

N

0 100 200 300 m

SCALE 1:7500

LEGEND :

- PHASE TWO PROPERTY BOUNDARY
- RECORD OF SITE CONDITION PROPERTY BOUNDARY
- PHASE ONE ESA STUDY AREA
- SIGNIFICANT WOODLANDS
- PROVINCIALLY SIGNIFICANT WETLANDS
- SIGNIFICANT VALLEY (SPEED RIVER)
- (PCA) POTENTIALLY CONTAMINATING ACTIVITY
- APEC 1 - Pesticide Use (PCA No.40)
- APEC 2 - Importation of Fill Material of Unknown Quality (PCA No.30)
- APEC 3 - Automotive Services and Repair facility (PCA No.10)
- APEC 4 - Waste Management and Waste Disposal (PCA No.58)

NOTES :

1-REFERENCES : GSP GROUP Inc. Drawing File compilation plan 1 - Oct 2012.dwg, October 2012; A.J. CLARKE AND ASSOCIATES Ltd. Survey Drawing Project T-2157A (2012, updated 2013).

2-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

Project

Conceptual Site Model

Part Lot 10, Concession 1, Beasley's Lower Block, Being Parts 1, 2 and 3 on Plan 58R17566, subject to an easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario

Title

SITE AND SURROUNDING LAND USE PLAN

Englobe

353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	E.Ciochon	Discipline	ENVIRONMENTAL
Drawn	K.Ashe	Scale	1:7500
Checked	A.Dunbrack	Date	2016-07-04

Project manager: A. Dunbrack

Sequence no.: 02 of 06

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	002	01

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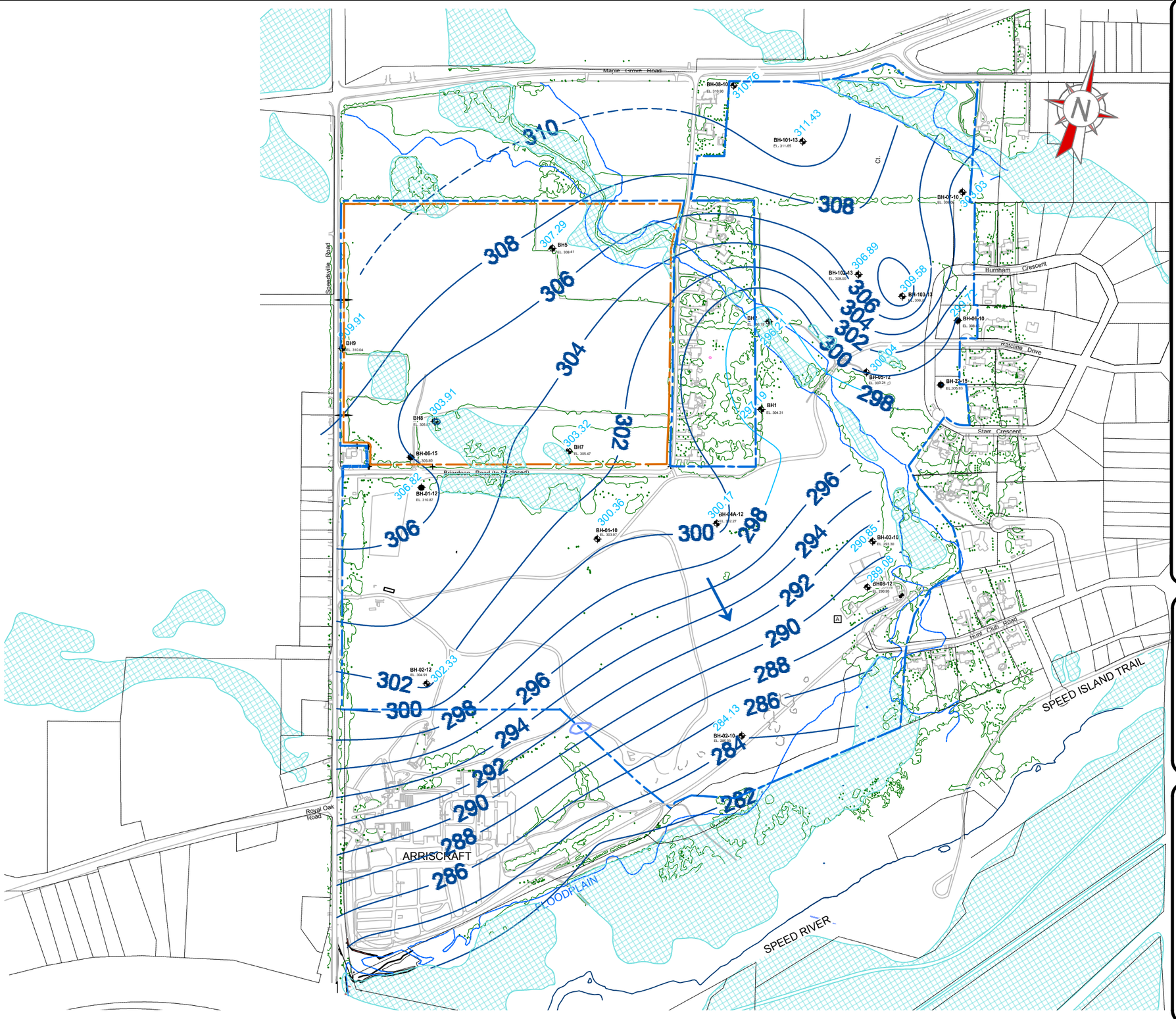

LEGEND :

- PHASE TWO PROPERTY BOUNDARY
- RECORD OF SITE CONDITION PROPERTY BOUNDARY
- MONITORING WELL LOCATION (2015 ENGLOBE HYDROGEOLOGY REPORT)
- EL. 308.06 — GROUND SURFACE ELEVATION (mASL)
- 303.03 — GROUNDWATER ELEVATION (mASL), APRIL 2015
- GROUNDWATER CONTOUR (mASL), APRIL 2015
- FLOODPLAIN
- WETLAND BOUNDARY
- INFERRED GROUNDWATER FLOW DIRECTION, April 2015
- mASL — METRES ABOVE MEAN SEA LEVEL

0 100 200 300 m

SCALE 1:7500

NOTES :

1-REFERENCES : GSP GROUP Inc. Drawing File compilation plan 1 - Oct 2012.dwg, October 2012.

2-REFERENCES : A.J. CLARKE AND ASSOCIATES Ltd, Survey Drawing Project T-2157A (2012, updated 2013).

3-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

Project

Conceptual Site Model

Part Lot 10, Concession 1, Beasley's Lower Block, Being Parts 1, 2 and 3 on Plan 58R17566, subject to an easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario

Title

GROUNDWATER ELEVATIONS AND INTERPRETED GROUNDWATER CONTOUR PLAN

Englobe Corp.
353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
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Prepared	E.Ciochon	Discipline	ENVIRONMENTAL
Drawn	E.Ciochon	Scale	1:7500
Checked	A.Dunbrack	Date	2016-07-04
Project manager	A.Dunbrack	Sequence no.	03 of 06

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	003	01

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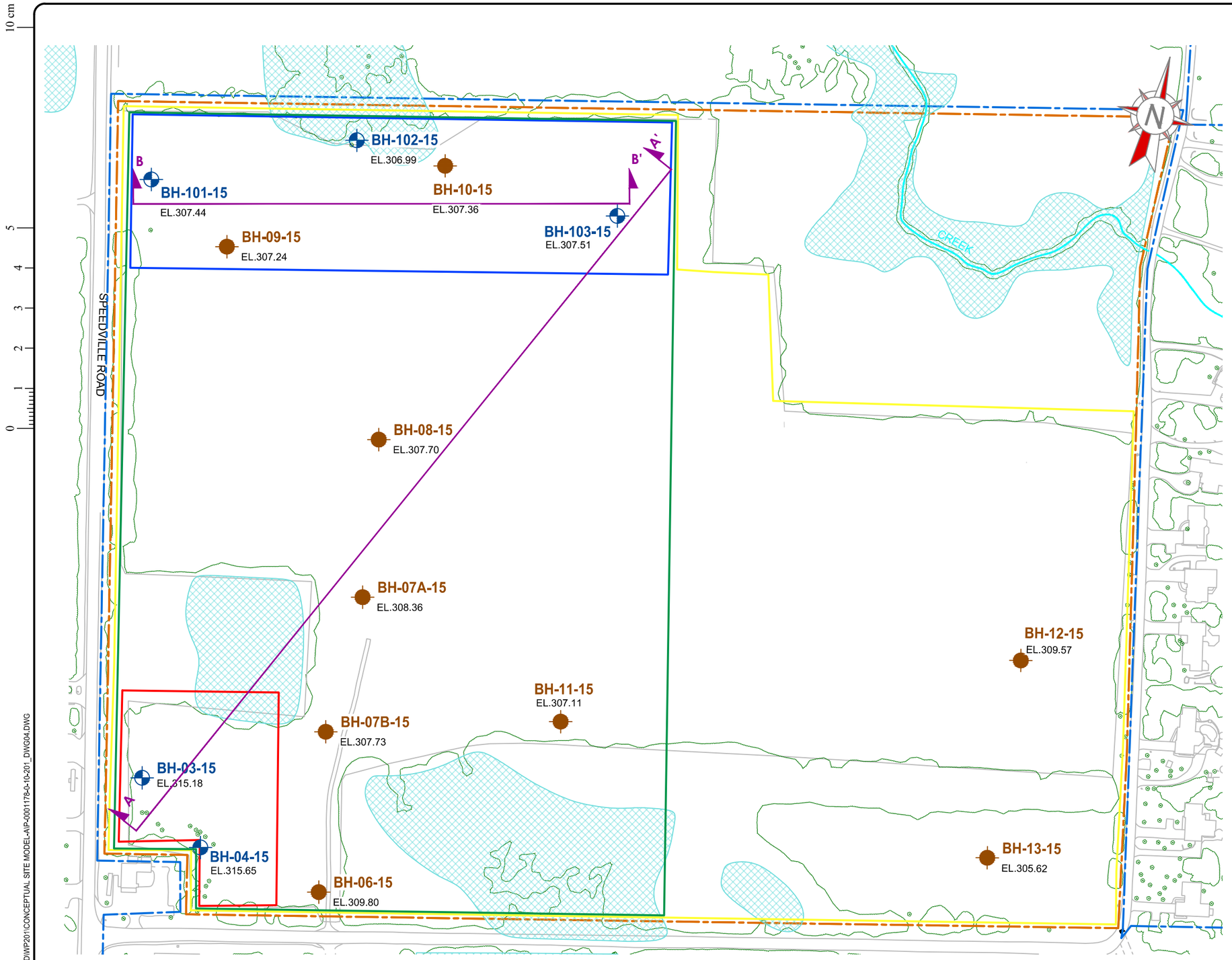


LEGEND :

- PHASE TWO PROPERTY BOUNDARY
- RECORD OF SITE CONDITION PROPERTY BOUNDARY
- BOREHOLE LOCATION (Englobe 2016, Phase Two ESA)
- MONITORING WELL LOCATION (Englobe 2016, Phase Two ESA)
- EL. 309.57 GROUND SURFACE ELEVATION (mASL)
- A A' GEOLOGICAL CROSS SECTION
- WETLAND BOUNDARY
- mASL METRES ABOVE MEAN SEA LEVEL
- APEC 1 - Pesticide Use (PCA No.40)
- APEC 2 - Importation of Fill Material of Unknown Quality (PCA No.30)
- APEC 3 - Automotive Services and Repair facility (PCA No.10)
- APEC 4 - Waste Management and Waste Disposal (PCA No.58)

NOTES :

1-REFERENCES : GSP GROUP Inc. Drawing File compilation plan 1 - Oct 2012.dwg, October 2012.

2-REFERENCES : A.J. CLARKE AND ASSOCIATES Ltd, Survey Drawing Project T-2157A (2012, updated 2013).

3-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

All soil and groundwater samples collected from environmental investigative locations and submitted for select chemical analysis meet the MOECC Table 1 Standards.

No soil samples were submitted for chemical analysis from borehole BH-07A-15.

Project

Conceptual Site Model

Part Lot 10, Concession 1, Beasley's Lower Block, Being Parts 1, 2 and 3 on Plan 58R17566, subject to an easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario

Title

BOREHOLE AND MONITORING WELL LOCATION PLAN

Englobe

353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	E.Ciochon	Discipline	ENVIRONMENTAL
Drawn	E.Ciochon	Scale	1:2500
Checked	A.Dunbrack	Date	2016-07-04

Project manager: A. Dunbrack

Sequence no.: 04 of 06

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	04	01

10 cm
0 1 2 3 4 5

BH-04-15		
Media	Parameter	Sample Depth (mbg)
Soil	PHC / BTEX / Metals	2.4-3.1
		10.7-11.3
	VOCs	10.7-11.3

BH-03-15		
Media	Parameter	Sample Depth (mbg)
Soil	PHC / BTEX / Metals	1.2-1.8
		8.2-8.8
	VOCs	8.2-8.8

BH-07B-15		
Media	Parameter	Sample Depth (mbg)
Soil	PHC / BTEX / Metals	0-0.6

BH-08-15		
Media	Parameter	Sample Depth (mbg)
Soil	PHC / BTEX / Metals	0-0.6

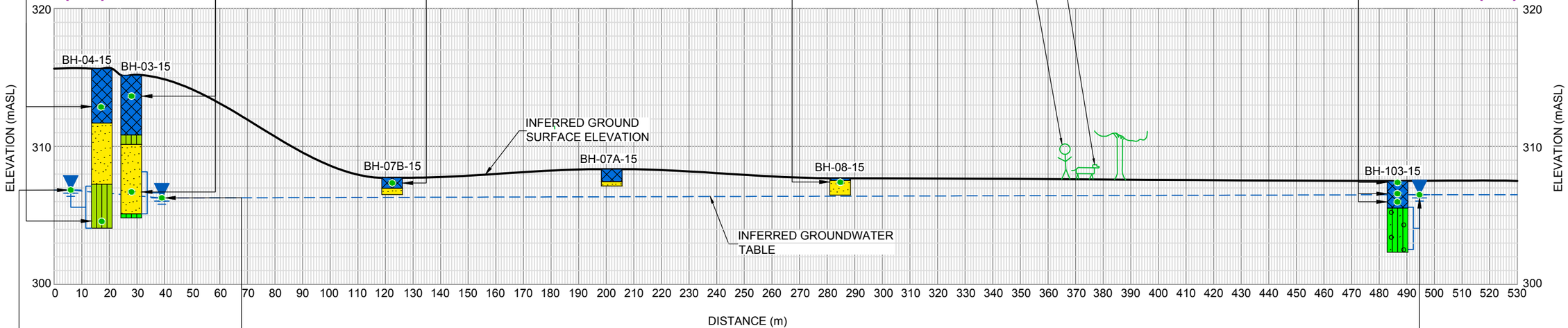
BH-103-15		
Media	Parameter	Sample Depth (mbg)
Soil	PAHs / PCBs / ABNs / CPs	0-0.6
	Metals / B-HWS / Cr (VI) / CN- / SAR	0.6-1.2
	PHC / BTEX / VOCs	1.2-1.8

INHALATION
(NO SOURCE - NO RISK)

INGESTION/UPTAKE
INHALATION
SKIN CONTACT
(NO SOURCE - NO RISK)

A (WEST)

A' (EAST)



BH-04-15	
Media	Parameter
Groundwater	PHC / BTEX / Metals / VOCs

BH-03-15	
Media	Parameter
Groundwater	PHC / BTEX / Metals / VOCs

BH-103-15	
Media	Parameter
Groundwater	PHC / BTEX / Metals / VOCs / PAHs / PCBs / ABNs / CPs / Cl- / Cr (VI) / Cn- / Hg

LEGEND :

FILL
SILT
SAND
SILT TILL

WATER LEVEL - JULY 20, 2015
mbg METRES BELOW GRADE
mASL METRES ABOVE MEAN SEA LEVEL

ALL SOIL AND GROUNDWATER SAMPLES COLLECTED FROM ENVIRONMENTAL INVESTIGATIVE LOCATIONS AND SUBMITTED FOR CHEMICAL ANALYSIS AS SHOWN MEET THE MOECC TABLE 1 STANDARDS .

NOTES :

1-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

2-No soil samples were submitted for chemical analysis from borehole BH-07A-15.

Project

Conceptual Site Model

Part Lot 10, Concession 1, Beasley's Lower Block, Being Parts1, 2 and 3 on Plan 58R17566, subject to an easement over Part 2 on Plan 58R-17566 as in B46505, City of Cambridge, Ontario

Title

GEOLOGICAL CROSS SECTION A - A'

Englobe Corp.
353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	K. Ashe	Discipline	ENVIRONMENTAL	Project manager	A. Dunbrack
Drawn	K. Ashe	Scale	H=1:1500, V=1:300	Sequence no.	05 of 06
Checked	A.Dunbrack	Date	2016-07-04		

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	005	01

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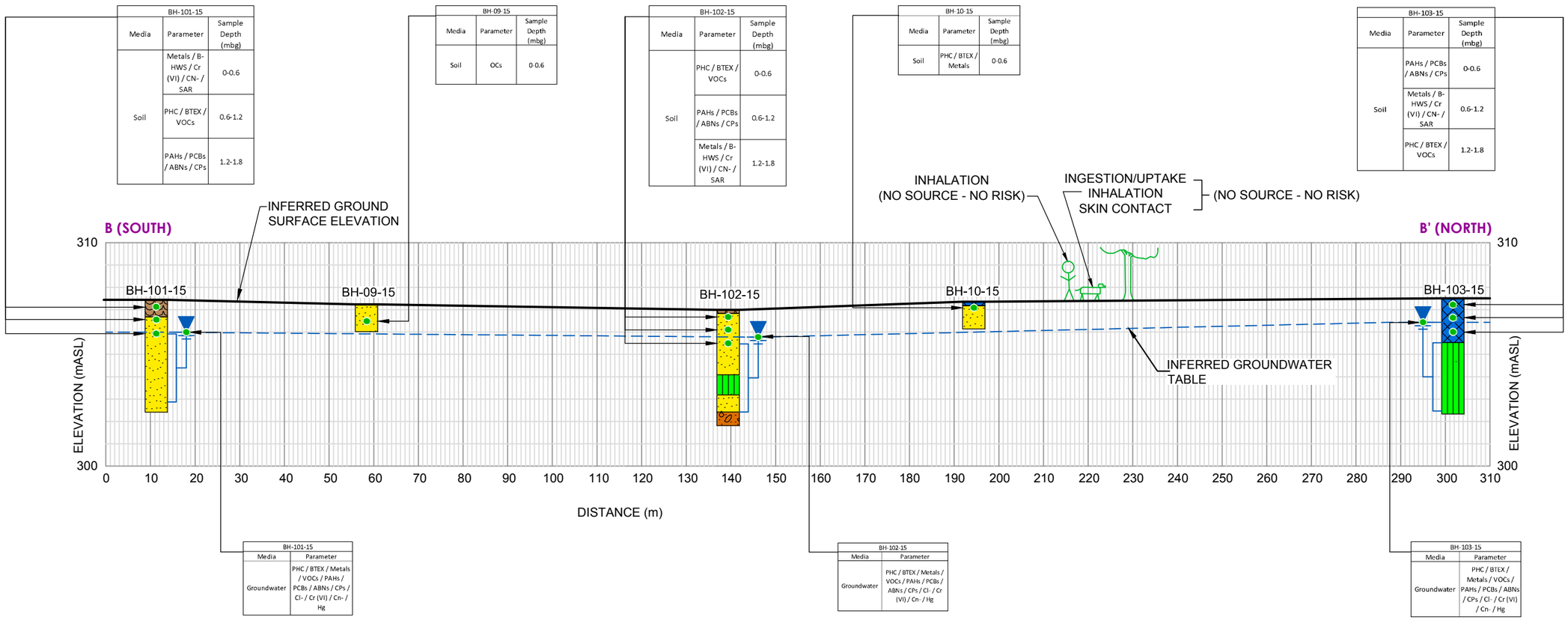

LEGEND :

- FILL
- TOPSOIL
- SAND
- SAND AND GRAVEL
- SILT TILL

WATER LEVEL - JULY 20, 2015

mbg METRES BELOW GRADE

mASL METRES ABOVE MEAN SEA LEVEL

ALL SOIL AND GROUNDWATER SAMPLES COLLECTED FROM ENVIRONMENTAL INVESTIGATIVE LOCATIONS AND SUBMITTED FOR CHEMICAL ANALYSIS AS SHOWN MEET THE MOECC TABLE 1 STANDARDS .

NOTES :

1-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

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Title

GEOLOGICAL CROSS SECTION B - B'

Englobe Corp.
353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	K. Ashe	Discipline	ENVIRONMENTAL	Project manager	A. Dunbrack
Drawn	K. Ashe	Scale	H=1:1000, V=1:200	Sequence no.	06 of 06
Checked	A.Dunbrack	Date	2016-07-04		

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0001178-0-10-201	HG	006	01

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