

No.2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire BB5 5GY

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Our Ref: BEK-24075-240624-LH

24<sup>th</sup> June 2024

**Lynne Howard** 180 Stapleton Hall Road London N4 4QL

#### Tincklers Lane, Eccleston - Site Investigation Report

BEK has been commissioned to prepare a Factual Letter Report detailing the findings of site investigation works undertaken at an area of land located off Tincklers Lane, Eccleston, Chorley, PR7 5QU (hereafter referred to as 'the site').

The site investigation works were undertaken by BEK in order to provide information regarding the shallow ground conditions at the site.

#### Site Location

The site is located to the east of Tincklers Lane in the north-west of the village of Eccleston, approximately 6.8 km west of Chorley.

#### **BEK Site Investigation**

The site investigation works were undertaken at the site by BEK on  $14^{th}$  June 2024 and consisted of the machine excavation of 7 x trial pits to a maximum depth of 3.4 m through the use of a JCB 3CX machine.

The ground conditions were recorded by an engineer from BEK and copies of the trial pit records are presented in Annex A. A series of photographs showing the trial pits are presented in Annex B. The exploratory locations are illustrated on BEK Drawing No 24075-1, a copy of which is presented in Annex C.

#### **Ground Conditions**

The site investigation works encountered an uppermost layer of topsoil in all exploratory locations described as 'Brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies'. The topsoil was encountered to depths varying from 0.1 m (Trial Pit TP7) to 0.2 m (Trial Pit TP2, TP3 & TP5).



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Natural strata was encountered beneath the topsoil in all exploratory locations and comprised the following three subtypes:

<u>'Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies (Boulder Clay)</u>' was encountered beneath topsoil in all exploratory locations to depths varying from 2.0 m (Trial Pit TP5) to 2.5 m (Trial Pit TP4). The base of this strata was proven in all exploratory locations excluding Trial Pit TP1.

<u>'Brownish red very clayey gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse</u> stone of mixed lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders increasing in abundance with depth (Bedrock Pieces?). Occasional sandy clay lenses' was encountered beneath clay in 6 of the 7 exploratory locations to depths varying from 3.2 m to 3.4 m. The base of this strata was only proven in Trial Pit TP3 at a depth of 3.2 m.

<u>'Light brown slightly clayey gravelly fine to medium silty SAND. Gravel is fine to coarse light</u> <u>brown fine to medium grained subangular to angular sandstone</u>' was encountered within Trial Pit TP3 from 3.2 m to a maximum proven depth of 3.4 m. This strata was interpreted to possibly be the upper weathered portion of the Sherwood Sandstone bedrock.

No evidence of groundwater was encountered during site investigation works, with all trial pits remaining dry during excavation.

No visual/olfactory evidence of contamination was encountered within any of the exploratory locations, with all strata encountered devoid of any evidence of anthropogenic influence.

In-situ testing using a handheld shear vane was carried out where suitable clay strata was encountered, the details of which can be seen on the trial pit logs presented in Annex A.

I trust the above is satisfactory. Please call me should you have any questions.

Yours sincerely

Michael Buckley BSC (Hons) MSc MEnvSci CEnv



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# ANNEX A

Trial Pit Records



**GEO-ENVIRONMENTAL CONSULTING** 

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP1 SHEET 1/7

#### COMPLETION 2.1 m

						1	
Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
						Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL)	- 0.2
0.4					,,	Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies.	0.4
0.6						(BOULDER CLAY)	0.6
0.8							0.8
- 1 -					;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		1 1
-1.2							- 1.2
- 1.4 - 1.6							- 1.4 
- 1.8							- 1.8
- 2							2
2.2					<u></u>	Termination Depth at: 2.1 m	2.2
2.4							2.4
2.6							2.6
2.8							- 2.8
- 3							- 3
- 3.2							- 3.2
- 3.4 - 3.6							- 3.4 - 3.6
- 3.8							- 3.8



**GEO-ENVIRONMENTAL CONSULTING** 

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

#### DATE 14th June 2024

TRIAL PIT NO TP2 SHEET 2/7

#### COMPLETION 3.4 m

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.2						Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL) Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies.	0.2
0.6						(BOULDER CLAY)	0.6
0.8							0.8
1							1
1.2			Shear Vane at 1.4 m				-1.2
1.4			>120KPa				1.4
1.6							- 1.6
1.8 2							- 1.8 - 2
2.2							2.2
2.4						Brownish red very clayey gravelly SAND. Sand is fine	2.4
2.6						to coarse. Gravel is fine to coarse stone of mixed lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders	2.6
2.8						increasing in abundance with depth (Bedrock Pieces?). Occasional sandy clay lenses	2.8
3					0.0.10 )		-3
3.2							- 3.2
<del>3.4</del> 3.6					<u> </u>	Termination Depth at: 3.4 m	<del>3.4</del> 3.6
3.8							3.8



**GEO-ENVIRONMENTAL CONSULTING** 

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP3 SHEET 3/7

## COMPLETION 3.4 m

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.2 0.4 0.6 0.8 1 1.2			Shear Vane at 0.8 m >120KPa			Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL) Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies. (BOULDER CLAY)	0.2 0.4 0.6 0.8 1 1.2 1.2
.6 .8 .2							- 1.6 - 1.8 - 2 - 2.2
.4 6						Brownish red very clayey gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse stone of mixed lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders increasing in abundance with depth (Bedrock Pieces?). Occasional sandy clay lenses	2.4 2.6
.8					o o o o o o o o o o o o o o o o o o o		2.8 3
.2					, <u>o</u> C	Light brown slightly clayey gravelly fine to medium silty SAND. Gravel is fine to coarse light brown fine to medium grained subangular to angular sandstone. (Weathered Bedrock?)	
5.6						Termination Depth at: 3.4 m	3.6
8.8							3.8



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PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP4 SHEET 4/7

## COMPLETION 3.2 m

COMMENTS Pit dry

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.2						Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL) / Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies. (BOULDER CLAY)	- 0.2 - 0.4
0.6			Shear Vane at 0.9 m >120KPa				- 0.6 - 0.8
1 1.2							- 1 - 1.2
1.4 1.6							- 1.4 - 1.6
1.8							- 1.8
2 2.2							- 2 - 2.2
2.4						Brownish red very clayey gravelly SAND. Sand is fine	2.4
2.6 2.8						to coarse. Gravel is fine to coarse stone of mixed lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders increasing in abundance with depth (Bedrock Pieces?).	- 2.6 - - 2.8
3						Occasional sandy clay lenses	
3.2						Termination Depth at: 3.2 m	-3.2
3.4							- 3.4
3.6							3.6
3.8							- 3.8



GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP5 **SHEET** 5/7

### COMPLETION 3.2 m

COMMENTS Pit dry

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
Ğ	De		Fie	Wa	5		
- 0.2						Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL) Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse	0.2
0.4						subangular to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies. (BOULDER CLAY)	0.4
0.6					$\stackrel{\text{\tiny D}}{=} \stackrel{\text{\tiny o}}{=} \stackrel{\text{\scriptsize o}}{=} \stackrel{\text{ o}}{=} $		0.6
0.8			Shear Vane at				0.8
- 1			1.1 m >120KPa				1
1.2							-1.2
1.4					······································		- 1 <u>.</u> 4
1.6							1.6
1.8							- 1.8
2						Brownish red very clayey gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse stone of mixed	2
2.2					0. 0. 0. 0. 0. 0.	lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders increasing in abundance with depth (Bedrock Pieces?).	2.2
2.4					, o'. (o'. (	Occasional sandy clay lenses	2.4
2.6					0.0.0.		2.6
2.8					0 0 0 0 0		2.8
3					) 0 0 0 0 0		-3
3.2					- 10	Termination Depth at: 3.2 m	3.2
3.4							- 3.4
3.6							3.6
3.8							3.8



**GEO-ENVIRONMENTAL CONSULTING** 

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP6 SHEET 6/7

#### COMPLETION 3.4 m

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.2						Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL)	0.2
) <u>.</u> 4						Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies. (BOULDER CLAY)	0.4
).6			Shear Vane at 0.7 m >120KPa				0.6
).8							0.8
							1
.2							- 1.2
.4							- 1.4
.6							1.6
.8							- 1.8
2						Brownish red very clayey gravelly SAND. Sand is fine	2
2.2					$\mathcal{O}^{\prime}_{\prime}$	to coarse. Gravel is fine to coarse stone of mixed lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders	2.2
2.4						increasing in abundance with depth (Bedrock Pieces?). Occasional sandy clay lenses	2.4
2.6					°)   0, 0   0, 0		-2.6
2.8					• • • • • • • • • • •		2.8
3					0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,		-3
3.2 3 <u>.4</u>					0.00		- 3.2 
3.6						Termination Depth at: 3.4 m	- 3.6
3.8							- 3.8



GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24075 PROJECT NAME Tincklers Lane, Eccleston CLIENT Lynne Howard

DATE 14th June 2024

TRIAL PIT NO TP7 SHEET 7/7

#### COMPLETION 3.2 m

COMMENTS Pit dry

					1		<del></del>
Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.2			Shear Vane at 0.7 m 107KPa			Long grass onto brown organic slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine stone of mixed lithologies. (TOPSOIL) Reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded stone of mixed lithologies. (BOULDER CLAY)	0.2 0.4 0.6 0.8
1 1.2 1.4 1.6			Shear Vane at 1.4 >120KPa				- 1 - 1.2 - 1.4 - 1.6
- 1.8 - 2 - 2.2						Brownish red very clayey gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse stone of mixed	- 1.8 - 2 - 2.2
2.4					$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	lithologies including light brown, fine to medium grained sandstone. Occasional sandstone cobbles & boulders increasing in abundance with depth (Bedrock Pieces?). Occasional sandy clay lenses	- 2.4
- 2.8 - 3					$\begin{array}{c} 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$		- 2.8
						Termination Depth at: 3.2 m	3.2 
3.8							- 3.8 



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# ANNEX B

Trial Pit Photographs

P1: Trial Pit TP1		P2: Trial Pit TP1		
P3: Trial Pit TP2		P4: Trial Pit TP2	<image/>	
P5: Trial Pit TP3		P6: Trial Pit TP3		
This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project details adjacent. BEK accepts no liability for the misinterpretation or use of this illustration by any other parties.	Site: Tincklers Lane, Eccleston Title: Annex B - Photographs	Photographs 1 to 6 Project No: 24075 Client: Lynne Howar	Created By: AH d	Date: June 2024

<image/> <image/>	<image/> <image/>
P9: trial Pit TP5	<image/> <caption></caption>
<image/>	P10: mark HS
This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project details adjacent. BEK accepts no liability for the misinterpretation or use of this illustration by any other parties.	Photographs 7 to 12

P13: Trial Pit TP7   P13: Construction	Photographs 13 to 14				
	Photographs 13 to 1	4			
This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project details adjacent REK associated	Site: Tincklers Lane, Eccleston	Project No: 24075	Created By:	Date: June 2024	
relating to the project details adjacent. BEK accepts no liability for the misinterpretation or use of this illustration by any other parties.	<b>Title:</b> Annex B - Photographs	Client: Lynne Howard	d		



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# ANNEX C

Drawings

