

Our Ref: KO/60275/Asb_GI

Your Ref:

10 March 2021

FAO Stephen Day
Tendring District Council
Town Hall,
Station Road,
Clacton on Sea,
Essex,
CO15 1SE

BY EMAIL TO:



Dear Stephen

Re: Starlings Site – Asbestos Investigation

As you are aware, we recently attended the above site to undertake intrusive investigation to assess asbestos contamination at the site, which had been visually identified by a third-party during site clearance activities.

The findings of this testing are summarised in this latter and shall be read in accordance with our limitations of investigation, which are enclosed.

These works were undertaken in accordance with our fee proposal of 13 January 2020, reference KO/60275/Asbestos.

Site Location

The site was located to the northwest of Milton Road, Dovercourt, Harwich, Essex, CO12 3EQ. A site location plan is presented as Figure 1 and is enclosed.

Previous RJJ Works

Richard Jackson Ltd have previously undertaken works at the site, as detailed in the following reports:

- Phase One Desk Study Report, ref. 60275 (November 2019);
- Ground Investigation Report, ref. 60275 (January 2020);
- Gas Monitoring Letter Report, ref. KB/60275 (30th April 2020).

This letter report forms an addendum to the above detailed reports.

Cont'd.../



also at: London [redacted] Cambridge [redacted] Bristol [redacted] and
Norwich [redacted]
Richard Jackson is a trading name of Richard Jackson Ltd. Registration No. 2744316 England.
Registered Office 847 The Crescent, Colchester, CO4 9YQ.

847 The Crescent,
Colchester, Essex CO4 9YQ

Telephone: [redacted]

Summary of Pertinent Previous Findings

Phase One Desk Study Report

This report disclosed the site the site to have been cleared of structures although concrete floor slabs and a single storey brick wall remained. The land was report to be overgrown with grasses with evidence of previous vegetation clearance of shrubs and trees also noted.

Debris including general waste, clothes, toys and furniture was also observed across the site. Vegetation stockpiles were present in the south of the site together with 2no. bulk bags of asbestos containing materials (ACM).

It was recommended that an asbestos waste specialist be employed with respect to the removal of the identified ACM in order that asbestos fibres were not released into the wider environment.

Intrusive investigation was also recommended and it was acknowledged that it would be prudent to included asbestos testing on soil samples as part of investigation works.

Ground Investigation Report

At the time of investigation the remained unchanged from that described during the Phase One Desk Study report.

The investigation on which this report was based comprised the formation of 6no. trial pits and 5no. windowless sampler boreholes and disclosed made ground to maximum depths of 1.90m below ground level (bgl) overlying in turn Head Deposits and the Thames Group.

Figure 2 Revision A, enclosed, indicates the location of exploratory holes.

Soils samples were recovered for chemical analyses, geotechnical testing and record keeping purposes.

Asbestos screening was undertaken in a total of 5no. soil samples recovered from this investigation. Asbestos encountered as microscopic cement fragments was recorded in the made ground recovered from 0.40-0.50m bgl in WS05. Asbestos was not detected in the remaining 4no. samples subject to asbestos screening.

Asbestos Investigation

Site Description

At the time of investigation, the site comprised a vacant parcel of land which had been cleared of structures, although concrete floor slabs were observed to remain.

Asbestos containing materials including cement sheets and insulating board panels and fragments were visually identified in the southwest of the site. Some of these materials were noted to be within bulk bags (as recorded during previous phases of investigation), however, some materials were also noted to be discarded at ground level. Photographs of the identified asbestos containing materials are enclosed.

Figure 2 - Revision A, enclosed, indicates the approximate extent of the area in which asbestos was visually identified to be present.

Fieldwork

The fieldwork on which this letter is based was undertaken on 15 February 2021 and comprised the mechanical excavation of 13no. trial pits (A01-A13). The trial pits were positioned to provide a representative coverage of the site.

An exploratory hole location plan is enclosed as Figure 2 - Revision A and indicates the location of the trial pits with respect to existing site layout, along with exploratory holes formed by Richard Jackson Ltd as part of previous phases of intrusive investigation.

The trial pits were excavated to depths of between 0.50m below ground level (bgl) and 0.60m bgl and soil samples were recovered from ground level and 0.50m bgl in each trial pit, in accordance with the requirements of TDC.

The exploratory hole logs are enclosed and give descriptions and depths of strata encountered, together with details of samples taken and other relevant information. Photographs of each of the trial pits are also enclosed for reference purposes.

Where applicable, investigation techniques, sampling and logging of soils complied with the requirements of British Standard BS:5930:- 'Code of Practice for Site Investigations' (2015).

Ground Conditions

The British Geological Survey (BGS) 1:50,000 scale series online mapping of the area, indicates the Thames Group to exist beneath the site. Previous intrusive investigation has disclosed Made Ground overlying, in turn, Head Deposits and the Thames Group.

The deposits encountered in this investigation were limited to the shallow Made Ground.

Made Ground

The made ground was encountered as a variable material, commonly comprising a blackish/greyish brown, silty, gravelly sand with the gravel recorded to comprise brick, concrete, flint, coal, glass, plastic, wood, ceramic tile and lightweight block.

Pieces of carpet and telephone cable were also recorded within the made ground in A08.

Possible former foundations or walls were recorded from 0.45m bgl and 0.50m bgl in A07 and A11 respectively.

A layer of asphalt was recorded from 0.12m bgl to 0.20m bgl in A12.

A concrete slab was recorded at 0.50m bgl in A06 and A08.

Asbestos Assessment

Laboratory Testing

Asbestos screening was undertaken on each of the 26no. recovered soil samples.

Asbestos quantifications were subsequently scheduled on 4no. soil samples where asbestos was positively identified as loose fibres.

The laboratory analysis was undertaken by Envirolab Ltd, a UKAS and MCerts accredited laboratory.

Summary of Analytical Results

The results of the asbestos screening and quantifications are discussed further below and full results are enclosed as Envirolab test report no. 21/01581.

Table 1 summarises the encountered asbestos contamination.

Table 1: Summary of encountered asbestos

Location	Depth (m bgl)	Asbestos Type	Asbestos Matrix	Quantification (%)
A02	0.50	Chrysotile	Loose Fibres	<0.001
A03	0.00	Chrysotile	Cement	n/a
A03	0.50	Chrysotile	Loose Fibres	<0.001
A04	0.50	Chrysotile	Loose Fibres	<0.001
A06	0.00	Chrysotile & Amosite	Board	n/a
A08	0.00	Chrysotile & Amosite	Board & Loose Fibres	3.412
A08	0.50	Chrysotile, Crocidolite & Amosite	Board & Cement	n/a

**n/a Where Asbestos was identified as a bulk material only (e.g. cement) quantifications were not undertaken.*

On the basis of the above, remediation is considered to be required at the site to mitigate the risk posed by asbestos contamination to the end users of the site and to manage the risk presented to construction workers, site neighbours and site visitors during the redevelopment of the site.

Summary

A remediation method statement (RMS) should be prepared for the site detailing the required remedial measures to be completed and how they are to be verified.

General

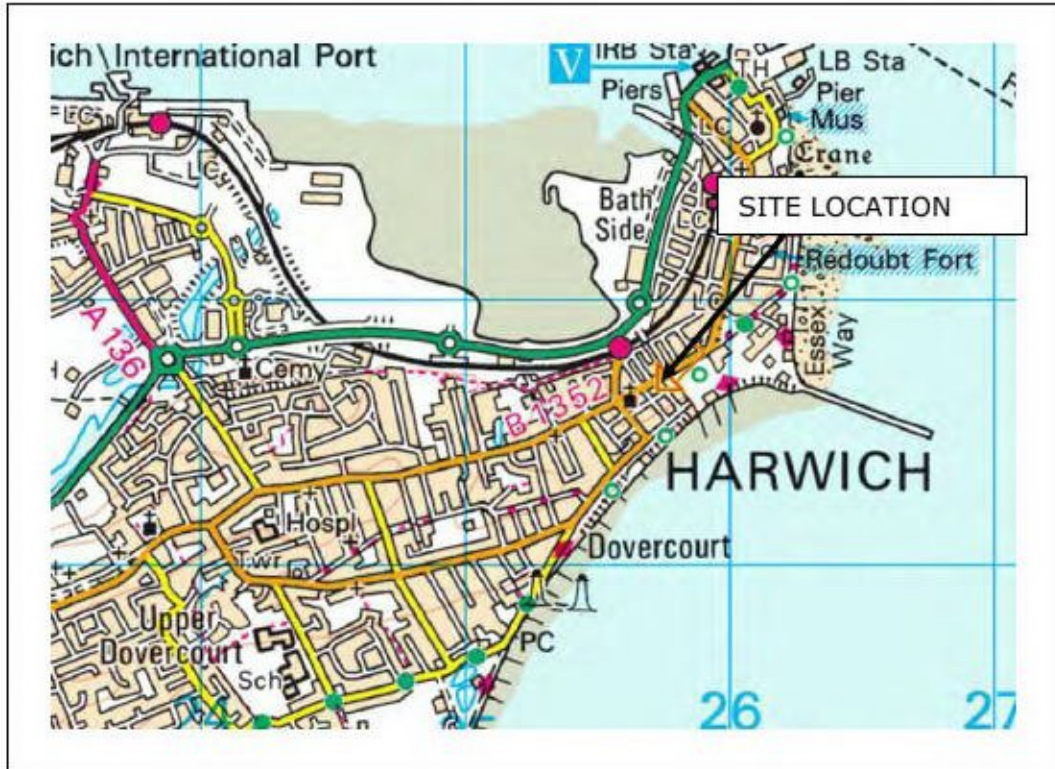
We trust that the above and enclosed are clear and acceptable, however, should you have any questions or queries please do not hesitate to contact us.

Yours sincerely

Kay O'Reilly MSci, FGS

Geotechnical Engineer
on behalf of Richard Jackson Limited

Enc Figure 1 – Site Location Plan
 Figure 2_Revision A – Exploratory Hole Location Plan
 Exploratory Hole Logs
 Photographs
 Envirolab Report no. 21/0158
 Limitations of Investigation



REPRODUCED FROM ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE, © CROWN COPYRIGHT RICHARD JACKSON LTD – ACC No. 100002572

Richard Jackson
Engineering Consultants
consulting civil & structural engineers
847 The Crescent, Colchester, CO4 9YQ

Starlings & Milton Road, Harwich,
Essex, CO12 3EQ

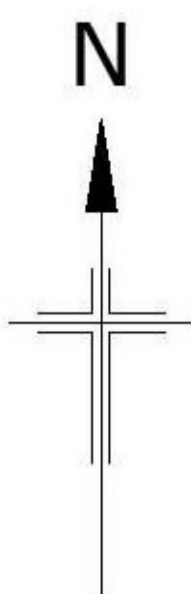
FIGURE 1

SITE LOCATION PLAN

SCALE: N.T.S.

JOB NO: 60275

DO NOT SCALE



KEY

: WINDOWLESS SAMPLER BOREHOLE

: TRIAL PIT

G : MONITORING WELL INSTALLED

: ASBESTOS SAMPLING LOCATION (A01 - A13)

: APPROXIMATE EXTENT OF AREA WITH VISUALLY IDENTIFIED SUSPECTED ASBESTOS CONTAINING MATERIALS (ACM)

: LOCATIONS WHERE ASBESTOS WAS ENCOUNTERED

REV	DATE	DESCRIPTION	DRAWN	CHKD
A	FEB 21	ASBESTOS SAMPLING LOCATIONS ADDED	FM	KO

REVISIONS
This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.



Project
**STARLINGS
MILTON ROAD
HARWICH**

Title
**EXPLORATORY HOLE LOCATION
PLAN**

Client
TENDRING DISTRICT COUNCIL

Scale	Drawn	Date
1:200 @ A1	J.BAKER	DEC 2019
Job Manager	Checked	Approved
R.LAYCOCK	K.O'REILLY	K.O'REILLY

Richard Jackson
Engineering Consultants
847 The Crescent, Colchester, Essex CO4 9YQ
Unit 6040, 5th Floor, Aldgate Tower, 2 Leaman Street, London E1 8FA
5 Quern House, Mill Court, Great Shefford, Cambs CB32 5LD
4 The Old Church, St. Matthews Road, Norwich, Norfolk NR1 1SP
The Wheelhouse, Bonds Mill, Stonehouse, Gloucestershire GL10 3RF

Drawing No.	Revision
60275/G/FIG02	A

Drawing Status		
<input checked="" type="checkbox"/> INFORMATION	<input type="checkbox"/> APPROVAL	<input type="checkbox"/> COSTING
<input type="checkbox"/> TENDER	<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> AS CONSTRUCTED



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m)	
Location: Milton Road, Dovercourt		Orientation:	1.00	Scale 1:10
Client: Tendring District Council		Depth (m): 0.50	0.40	Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Grass over brown/black gravelly sandy CLAY. Gravel of fine to medium subangular to subrounded brick, concrete, flint and wood fragments and subangular to subrounded fine to medium flint. MADE GROUND
	0.50	D2			0.50		End of Pit at 0.500m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m)	
Location: Milton Road, Dovercourt		Orientation:	0.90 	Scale 1:10
Client: Tendring District Council		Depth (m): 0.50		0.40

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1			0.15		Grass over black gravelly silty medium SAND. Gravel of brick, concrete and subangular to subrounded fine to medium flint and coal. MADE GROUND
	0.50	D2			0.50		Firm brown gravelly silty CLAY. Gravel fine to medium concrete and concrete cobbles. MADE GROUND
							End of Pit at 0.500m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No.: 60275	Co-ords:		Date: 15/02/2021
		Level (m):	Dimensions (m): 1.00	
Location: Milton Road, Dovercourt		Orientation:	0.55	Scale: 1:10
Client: Tendring District Council		Depth (m): 0.50		

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown/black gravelly medium SAND. Gravel fine coal fragments and occasional glass fragments with cobble sized brick and concrete. MADE GROUND
	0.50	D2			0.50		End of Pit at 0.500m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks: Suspected asbestos containing materials (ACM) noted at ground level.	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.00	
Location: Milton Road, Dovercourt			Orientation:	Scale 1:10
Client: Tendring District Council			Depth (m): 0.60	

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown gravelly cobbly medium SAND. Gravel of fine cobble sized brick and concrete with occasional ceramic tile and lightweight block fragments. MADE GROUND
	0.50	D2			0.50		Firm brownish grey silty CLAY. MADE GROUND
					0.60		End of Pit at 0.600m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.00	
Location: Milton Road, Dovercourt		Orientation:	0.50	Scale 1:10
Client: Tendring District Council		Depth (m): 0.50		Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Reddish brown gravelly medium SAND. Gravel of subangular to subrounded fine to medium flint and cobble sized brick and concrete fragments with occasional ceramic tile. MADE GROUND
	0.50	D2		0.50			

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.00	
Location: Milton Road, Dovercourt			Orientation:	Scale 1:10
Client: Tendring District Council			Depth (m): 0.50	

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown gravelly medium SAND. Gravel of subangular to subrounded fine to medium flint with fine cobble sized brick and concrete with occasional wood and glass. MADE GROUND
	0.50	D2			0.49 0.50		CONCRETE SLAB End of Pit at 0.500m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date
		Level (m):	Dimensions (m)	15/02/2021
Location: Milton Road, Dovercourt		Orientation:	1.10	Scale 1:10
Client: Tendring District Council		Depth (m): 0.55	0.50	Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown gravelly medium SAND. Gravel of subangular to subrounded fine to medium flint with fine cobble sized brick, lightweight block fragments and occasional wood fragments. MADE GROUND
	0.50	D2			0.45 0.55		Brown silty CLAY with black gravelly sand partings. Gravel recovered as light yellow very hard brick fragments. (Possible foundation or wall). MADE GROUND <small>End of Pit at 0.550m</small>

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No.: 60275	Co-ords:		Date: 15/02/2021
		Level (m):	Dimensions (m): 0.90	
Location: Milton Road, Dovercourt		Orientation:	0.50	Scale: 1:10
Client: Tendring District Council		Depth (m): 0.50		Logged: TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Dark brown gravelly medium SAND. Gravel of fine cobble sized brick with concrete render, wood, telephone cable, plastic, metal and carpet fragments. MADE GROUND
	0.50	D2			0.49 0.50		CONCRETE SLAB End of Pit at 0.500m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks: Suspected fragments of asbestos insulating board (AIB) noted at ground level.	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.10	
Location: Milton Road, Dovercourt			Orientation:	Scale 1:10
Client: Tendring District Council			Depth (m): 0.60	

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Dark brown/grey slightly gravelly sandy CLAY. Gravel of subangular to subrounded fine to medium flint with occasional brick fragments. MADE GROUND
	0.50	D2					
					0.60		End of Pit at 0.600m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.10	
Location: Milton Road, Dovercourt			Orientation:	Scale 1:10
Client: Tendring District Council			Depth (m): 0.60	

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown gravelly SAND. Gravel of subangular to subrounded flint with fine cobble sized brick, concrete, plastic, wood and ceramic tile fragments. MADE GROUND
	0.50	D2					
					0.60		End of Pit at 0.600m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.00	
Location: Milton Road, Dovercourt		Orientation:		Scale 1:10
Client: Tendring District Council		Depth (m): 0.50		Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Dark brown slightly gravelly clayey medium SAND. Gravel of subangular to subrounded fine to medium flint with brick fragments. MADE GROUND
	0.50	D2			0.50		

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 1.10	
Location: Milton Road, Dovercourt		Orientation:	0.45	Scale 1:10
Client: Tendring District Council		Depth (m): 0.60		Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1			0.12		Brown gravelly medium SAND. Gravel of subangular to subrounded fine to medium flint and brick fragments. MADE GROUND
					0.20		ASPHALT MADE GROUND
	0.50	D2			0.60		Brown slightly gravelly silty CLAY with brick and mortar fragments. MADE GROUND
							End of Pit at 0.600m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



Project Name: Starlings	Project No. 60275	Co-ords:		Date 15/02/2021
		Level (m):	Dimensions (m) 0.90	
Location: Milton Road, Dovercourt		Orientation:	0.50	Scale 1:10
Client: Tendring District Council		Depth (m): 0.60		Logged TS

Ground water	Samples & In Situ Testing			Level (m)	Depth (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D1					Brown gravelly medium SAND. Gravel of subangular to subrounded fine to medium flint and ash with brick, plastic, wood, ceramic tile, metal, glass and plastic fragments. MADE GROUND
	0.50	D2					
					0.60		End of Pit at 0.600m

Groundwater: Groundwater not encountered	Key			
Stability: Dry and Stable	D	Disturbed	IVN	Hand Vane
Remarks:	B	Bulk	PID	PID Reading
	ES	Environmental	PP	Pocket Penetrometer
		Groundwater strike		Standing water level



P1: Bulk bags of asbestos containing materials.



P2: ACM at ground level.



P3: ACM at ground level.



P4: Cement ACM



P5: ACM at ground level.



P6: A01



P7: A02



P8: A03



P9: A04



P10: A05



P11: A06



P12: A07



P13: A08



P14: A09



P15: A10



P16: A11



P17: A12



P18: A13

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 21/01581
Issue Number: 1
Date: 26 February, 2021

Client: Richard Jackson Ltd
847 The Crescent
Colchester Business Park
Colchester
CO4 9YQ

Project Manager: Kay O'Reilly
Project Name: Milton Road, Dovercourt
Project Ref: 60275
Order No: KO/60275
Date Samples Received: 17/02/21
Date Instructions Received: 17/02/21
Date Analysis Completed: 24/02/21

Prepared by:



Melanie Marshall
Laboratory Coordinator

Approved by:



Sophie France
Client Service Manager

Envirolab Job Number: 21/01581

Client Project Name: Milton Road, Dovercourt

Client Project Ref: 60275

Lab Sample ID	21/01581/1	21/01581/2	21/01581/3	21/01581/4	21/01581/5	21/01581/6	21/01581/7	Units	Limit of Detection	Method ref			
Client Sample No	1	2	1	2	1	2	1						
Client Sample ID	A01	A01	A02	A02	A03	A03	A04						
Depth to Top	0.00	0.50	0.00	0.50	0.00	0.50	0.00						
Depth To Bottom													
Date Sampled	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21						
Sample Type	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D						
Sample Matrix Code	2AE	2ABE	2AE	4ABE	2ABE	2AB	4AB						
Asbestos in Soil (inc. matrix)													
Asbestos in soil ^o	NAD	NAD	NAD	Chrysotile	Chrysotile	Chrysotile	NAD			A-T-045			
Asbestos Matrix (visual) _o	-	-	-	-	Cement	-	-			A-T-045			
Asbestos Matrix (microscope) _o	-	-	-	Loose Fibres	-	Loose Fibres	-			A-T-045			
Asbestos ACM - Suitable for Water Absorption Test? _o	N/A	N/A	N/A	N/A	Yes	N/A	N/A			A-T-045			
Asbestos in Soil Quantification % (Hand Picking & Weighing)													
Asbestos in soil % composition (hand picking and weighing) _o	-	-	-	<0.001	-	<0.001	-	% w/w	0.001	A-T-054			

Envirolab Job Number: 21/01581

Client Project Name: Milton Road, Dovercourt

Client Project Ref: 60275

Lab Sample ID	21/01581/8	21/01581/9	21/01581/10	21/01581/11	21/01581/12	21/01581/13	21/01581/14	Units	Limit of Detection	Method ref			
Client Sample No	2	1	2	1	2	1	2						
Client Sample ID	A04	A05	A05	A06	A06	A07	A07						
Depth to Top	0.50	0.00	0.50	0.00	0.50	0.00	0.50						
Depth To Bottom													
Date Sampled	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21						
Sample Type	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D						
Sample Matrix Code	2ABE	4A	4B	4BE	4ABE	4AE	4AB						
Asbestos in Soil (inc. matrix)													
Asbestos in soil*	Chrysotile	NAD	NAD	Chrysotile & Amosite	NAD	NAD	NAD			A-T-045			
Asbestos Matrix (microscope)Ⓞ	Loose fibres	-	-	Board	-	-	-			A-T-045			
Asbestos ACM - Suitable for Water Absorption Test?Ⓞ	N/A	N/A	N/A	No	N/A	N/A	N/A			A-T-045			
Asbestos in Soil Quantification % (Hand Picking & Weighing)													
Asbestos in soil % composition (hand picking and weighing)Ⓞ	<0.001	-	-	-	-	-	-	% w/w	0.001	A-T-054			

Envirolab Job Number: 21/01581

Client Project Name: Milton Road, Dovercourt

Client Project Ref: 60275

Lab Sample ID	21/01581/15	21/01581/16	21/01581/17	21/01581/18	21/01581/19	21/01581/20	21/01581/21	Units	Limit of Detection	Method ref
Client Sample No	1	2	1	2	1	2	1			
Client Sample ID	A08	A08	A09	A09	A10	A10	A11			
Depth to Top	0.00	0.50	0.00	0.50	0.00	0.50	0.00			
Depth To Bottom										
Date Sampled	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21			
Sample Type	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D			
Sample Matrix Code	4ABE	2ABE	4AB	6AE	2BE	2ABE	4ABE			
Asbestos in Soil (inc. matrix)										
Asbestos in soil*	Chrysotile & Amosite	Chrysotile & Crocidolite & Amosite	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual) _o	Board	Cement	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _o	Loose fibres	Board	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _o	Yes	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045
Asbestos in Soil Quantification % (Hand Picking & Weighing)										
Asbestos in soil % composition (hand picking and weighing) _o	3.412	-	-	-	-	-	-	% w/w	0.001	A-T-054

Envirolab Job Number: 21/01581

Client Project Name: Milton Road, Dovercourt

Client Project Ref: 60275

Lab Sample ID	21/01581/22	21/01581/23	21/01581/24	21/01581/25	21/01581/26			Units	Limit of Detection	Method ref
Client Sample No	2	1	2	1	2					
Client Sample ID	A11	A12	A12	A13	A13					
Depth to Top	0.50	0.00	0.50	0.00	0.50					
Depth To Bottom										
Date Sampled	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21	15-Feb-21					
Sample Type	Soil - D	Soil - D	Soil - D	Soil - D	Soil - D					
Sample Matrix Code	4ABE	4ABE	4AB	2ABE	2ABE					
Asbestos in Soil (inc. matrix)										
Asbestos in soils*	NAD	NAD	NAD	NAD	NAD					A-T-045
Asbestos ACM - Suitable for Water Absorption Test?_D	N/A	N/A	N/A	N/A	N/A					A-T-045

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR

[REDACTED]

Client:	Richard Jackson Ltd, 847 The Crescent, Colchester Business Park, Colchester , CO4 9YQ	Project No:	21/01581
Project:	Milton Road, Dovercourt	Date Received:	17/02/2021 (am)
Clients Project No:	60275	Cool Box Temperatures (°C):	6.3, 6.4

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Limitations of Investigation

This report is based on the results of the exploratory boreholes, the laboratory testing carried out on samples recovered from those boreholes and on details of the scheme provided by the Client.

This report has been prepared for the benefit of Tendring District Council, and its contents should not be relied upon by others without the written authority of Richard Jackson Ltd. If any unauthorised third party makes use of this report they do so at their own risk and Richard Jackson Ltd owes them no duty of care or skill.

All information provided by others is taken as being in good faith as being accurate, but Richard Jackson Ltd cannot, and does not; accept any liability for the detailed accuracy, errors or omissions in such information.

Subsoils are by their nature hidden from view and no investigation can be exhaustive to the extent that all soil conditions are revealed. Conditions may well be present beneath the site which was not evident from the investigations carried out.

Geological data, with the exception of geological maps held by Richard Jackson Ltd, Ordnance Survey maps and aerial photographs have not been inspected, nor has any other data relating to site conditions past or present, or any information regarding underground services, other than as indicated.

Groundwater levels can be subject to considerable seasonal variations, and the conditions encountered in the exploratory holes may not reflect long-term conditions.

There can be no guarantee that the samples analysed represent the highest concentrations of contamination present beneath the site. The chemical analysis results have been assessed to standards appropriate at the time of investigation.

Unless a greater period of retention of samples is agreed, it is our normal practice to discard all samples one month after submission of our final report.