

emapsite™

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

Report Reference: EMS-487660_655203 Client Reference: EMS_487660_655203





10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site Guidance: No Guidance Required.

None identified





Contact Details

emapsite

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British Geological Survey Enquiries

Kingsley Dunham Centre Keyworth, Nottingham NG12 5GG Tel: 0115 936 3143. Fax: 0115 936 3276. Email:

Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:

enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 03708 506 506

Web: www.environment-agency.gov.uk Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office Public Health England, Wellington House 133-155 Waterloo Road, London, SE1 8UG www.gov.uk/phe

Email:enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5

www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton SO16 0AS Tel: 08456 050505

Data

Local Authority

Authority: Cherwell District Council
Phone: 01295 252 535
Web: http://www.cherwell-dc.gov.uk/
Address: Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA

Gemapping PLC

Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW Tel: 01252 845444













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Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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Report Reference: EMS-487660_655203 Client Reference: EMS_487660_655203





Standard Terms and Conditions

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https://www.groundsure.com/terms-and-conditions-may25-2018

APPENDIX C

Start

R1

1:50

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 2

E 456273.00 N 223133.00

Scale

Coordinates

Depth	TCR SCR RQD	If	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Ins	tall
				_ _ _								
				 _ _ _		84.58	0.30)	Topsoil - driller's description. (TOPSOIL) CLAY with Cornbrash (limestone) - driller's description.				
			S		N >50	83.38	1.50	No recovery.				
						- - - -	(1.50)					
3.00			С	3.00	N >50	81.88	3.00	Firm to stiff interbedded dark grey and greenish grey CLAY.				
	74 68					- - - -		Rare dark speckling possible bioturbation. (CORNBRASH FORMATION) Between 3.61m and 3.79m bgl: band of medium strong light grey mottled bluish grey limestone.				
4.50	66	NA		- - - - -		- - - - -	(2.35)	Between 4.10m and 4.50m bgl: No recovery. From 4.50m bgl: frequent black specking - possible bioturbation.				
	100 84					70.52	F 25	Between 4.96m and 5.35m bgl: band of slightly gravelly clay. Gravel is fine to medium subangular to subrounded limestone.				
6.00	79	NI 74	C C	5.66 - 5.94 -6.00 -		79.53	5.35	Very weak light grey very thinly to thickly bedded LIMESTONE. (CORNBRASH FORMATION) Between 5.35m and 5.39m bgl: non intact. Between 5.49m and 5.57m bgl: non intact.				
	98 47	880		6.08 - - -		78.15	6.73	Between 6.25m and 6.52m bgl: subvertical fracture. From 6.66m bgl: becoming slightly clayey and brownish grey.				
7.50 -	43	NA				- - - - -	(0.86)	Firm greenish grey CLAY. (CORNBRASH FORMATION) Between 6.91m and 7.11m bgl: very dark colouration possible bioturbation. Between 6.98m and 7.16m bgl: frequent orange staining.				
7.50	99	NI 70 250	С	7.65 - 7.71		77.29-	7.59 (0.63) 8.22	Weak greenish grey mottled bluish grey and light grey LIMESTONE. (CORNBRASH FORMATION) Between 7.59m and 8.09m bgl: slightly silty with occasional lenses of				
	41 23	NA		- - - - - -		76.27	(0.39) 8.61	black bioturbated clay (<1/mm x 5mm). Between 7.74m and 7.76m bgl: non intact. At 7.94m bgl: band of silty limestone <9mm thick. Between 7.95m and 8.09m bgl: subhorizontal fracture with dark grey staining on fracture surface.				
9.00 -	100 90 90		С					Firm brownish grey CLAY. (CORNBRASH FORMATION) Between 8.34m and 8.61m bgl: very dark colouration At 8.34m bgl: loading structures from firmer clay into softer clay. Weak grey mottled bluish grey and brownish grey thinly to thickly bedded LIMESTONE. (CORNBRASH FORMATION)				

Installation: 50mm diameter standpipe installed to 12.00m bol.

bgl. **Remarks:** Borehole backfilled with arisings on completion.

		Groundwater Strikes			Drilled: Dynamic
Depth Strike	Rise	Remarks	Cased	Sealed	Sampling (UK) Ltd Logged: ST
					Checked: AP



BOREHOLE LOG - ROTARY

R1

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 2 of 2

 Start
 28/08/2018
 Coordinates
 E 456273.00 N 223133.00
 Scale
 1:50

End 28/08/2018 **Ground Level** 84.88m AOD **Total Depth** 12.00m

End		28	/08/2018	3	Gro	ound Le		84.88m AOD Total Depth		1	12.00m
Depth (m)	TCR SCR RQD	lf	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	_egend	GW	Install
10.50		NI 160 940	C				(3.39)	Weak grey mottled bluish grey and brownish grey thinly to thickly bedded LIMESTONE. (CORNBRASH FORMATION) Between 8.79m and 9.42m bgl: subvertical fracture with darker grey staining on fracture surface. Between 9.42m 9.56m bgl: band of dark grey clay. Between 9.74m and 9.78m bgl: dark grey staining. Between 10.50m and 10.66m bgl: band of dark grey clay.			
				-				From 11.64m bgl: becoming fossiliferous to base.			
12.00						72.88	12.00	End of Borehole at 12.00m			· · · · · · · · · · · · · · · · · · ·

Installation: 50mm diameter standpipe installed to 12.00m

bgl. **Remarks:** Borehole backfilled with arisings on completion.

		Groundwater Strikes		Drilled: Dynamic
Depth Strike	Rise	Remarks	Cased	Sampling (UK) Ltd
				Campling (Ort) Etd
				Logged: ST
				L
				Checked: AP



Start

R2

1:50

Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd **Sheet** 1 of 2

31/08/2018 **Ground Level** 84.60m AOD **Total Depth** End 11.50m

E 456254.00 N 222987.00

Scale

Coordinates

Depth (m)	TCR SCR RQD	lf	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Ins	stall
			,,			_	(0.30)	Topsoil - Driller's description.				
				L		84.30_	0.30	(TOPSOIL) Cornbrash (limestone) - driller's description.	<u> </u>			E
				_		-	(0.70)	dimensional dimensional			_	F
				_		_	(0.70)				二	Ξ
			S	_ 1.00	N = 39	83.60	1.00		\vdash		=	E
				_		_		No recovery.	<u></u>		ᄅ	E
				_		_					三	Е
				_		-			<u> </u>	1		
				_		_	(4.70)		<u> </u>		_	
				_			(1.76)		<u></u>			
				_		-			F_=_=	1	_	Е
0.50			_	- 2.50	N × FO	-					_	-
2.50			С	_ 2.50	N >50	_			<u> </u>		=	E
		NA		E		81.84	2.76	Brown slightly sandy gravelly CLAY. Gravel is fine to coarse		1	吕	E
	82	14/1	С	 - 3.08 -		81.61	(0.23) 2.99	subrounded limestone. (Drilling induced loss of strength -			目	E
	61		0	3.21		_	2.00	recovered soft).	H		_	
	56	NI 175	С	_ 3.43 -		_	(1.01)	\((CORNBRASH FORMATION) Medium strong bluish grey and light grey LIMESTONE.	Щ		二	
		590		_ 3.67		_	(1.01)	(CORNBRASH FORMATION)			\equiv	=
				_		_		At 3.04m bgl: non intact, recovered as 1No. gravel of limestone.	H	-	=	Ξ
4.00				_		80.60	4.00	At 3.04m bgl: subhorizontal fracture with brownish grey penetrative staining (10-20mm).			吕	E
				_		_		At 3.14m bgl: 1No. pocket of brown clay with penetrative staining in limestone.		}	=	
				_		_		At 3.21m bgl: subhorizontal fracture with brownish grey penetrative				E
	95 45			_		_	(4 ==\)	staining approximately 20mm thick. At 3.40m bgl: subhorizontal fracture with brownish grey penetrative				
	45	NA		_		=	(1.57)	staining approximately 50mm thick.			_	E
				_		_		Between 3.41 and 4.00m bgl: fossiliferous Firm to stiff greenish grey slightly gravelly CLAY. Gravel is fine			_	
				_		_		subrounded limestone.			_	
5.50				_		79.03_	5.57	(CORNBRASH FORMATION)			=	=
		NI	С	- 5.69 -		79.03	3.31	Between 4.47m and 4.62m bgl: rare pockets of black bioturbated clay. Between 4.67m and 4.85m bgl: rare pockets of yellowish brown clay.			三	E
		60		6.11		7	(0.62)	Between 5.17m and 5.50m bgl: frequent fine subrounded gravel of			뮴	E
	93	540		_		78.41-	6.19	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			三	
	57 51			E		, 0.4	0.13	(CORNBRASH FORMATION)	<u> </u>	1	머	\vdash
				F			(0:	At 6.11m bgl: subhorizontal fracture.	L	1	H	
		NA		L			(0.93)	Stiff greenish grey mottled black bioturbated CLAY. (CORNBRASH FORMATION)	<u></u>	-	믁	H
7.00				_				`Between 6.51m and 6.73m bgl: frequent yellowish brown and dark grey	<u> </u>	1	且	E
7.00						77.48	7.12	staining.	 			#
				L				Weak brownish grey mottled grey and light grey silty LIMESTONE. Occasionally fossiliferous with rare calcite			ŀ	<u></u>
	100			F		=		veining.				· · · ·
	47			Ė		=		(CORNBRASH FORMATION)		1]: ∵
	47			_		_		Between 7.56m to 7.71m bgl: band of stiff greenish grey silty clay. Between 7.65m and 7.67m bgl: band of fractured limestone (medium to				<u> </u>
				F		=		coarse angular to subangular gravel). Between 7.71m and 8.38m bgl: subvertical fracture.				<u> </u>
0.50		NI		F		=		Between 7.85m and 7.86m bgl: non intact, recovered as medium to				∏∷ં.
8.50		140		F		=		coarse angular to subrounded gravel. Between 8.00m and 8.04m bgl: non intact, recovered as medium to	H			#
		690		F		7		coarse angular to subrounded gravel.		1		∄: [
	1			⊢	I	1 -		I	\perp	1		0 0

(4.38)

with quartzite veining.

Installation: 50mm diameter standpipe installed to 11.50m

9.69 -

9.76

С

99 71 56

10.00

bgl. Remarks: Borehole backfilled with arisings on completion.

		Groundwater Strikes			Drilled: Dynamic
Depth Strike 8.50	Rise 8.50	Remarks	Cased	Sealed	Sampling (UK) Ltd Logged: ST
					Checked: AP

Diameter: 120mm to 11.50m

Between 9.07m and 9.16m bgl: band of greenish grey mottled dark grey clay.

Between 9.16m and 9.27m bgl: 1No. fracture approximately 45 degrees clean smooth planar.

Between 9.61m and 9.68m bgl: 1No. fracture approximately 45 degrees

Continued next sheet



Start

R2

1:50

Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 2 of 2

Coordinates

End 31/08/2018 **Ground Level** 84.60m AOD 11.50m

E 456254.00 N 222987.00

Scale

Total Depth

Depth SCR If Sample Treat Type (m) Result Level Company Company
Weak brownish grey mottled grey and light grey silty LIMESTONE. Occasionally fossiliferous with rare calcite veining. (CORNBRASH FORMATION) Between 10.00m and 10.23m bgl: band of very stiff/weak greenish grey clay/mudstone. At 10.45m bgl: subhorizontal fracture clean smooth stepped. Between 10.55m and 10.58m bgl: subhorizontal fracture with greenish grey penetrative staining. Between 10.61m and 10.63m bgl: recovered as medium to coarse subangular to subrounded gravel of limestone. Between 10.67m and 10.83m bgl: dark grey staining.

Installation: 50mm diameter standpipe installed to 11.50m

bgl. **Remarks:** Borehole backfilled with arisings on completion.

		Groundwater Strikes			Drilled: Dynamic
Depth Strike 8.50	Rise 8.50	Remarks	Cased	Sealed	Sampling (UK) Ltd Logged: ST
					Checked: AP



Start

R3

1:50

ProjectHowes Lane, BicesterProject No.AG2873-18

ClientAlbion Land Two LtdSheet1 of 2

E 456389.42 N 222879.19

Scale

Coordinates

TCR SCR Sample Strata Depth Level Depth Depth GW lf Result Description of Strata Legend Install / Test (mAoD) RQD Туре (0.30)Topsoil - driller's description. (TOPSOIL) 82.05 0.30 Cornbrash (limestone) - driller's description. (0.70)1.00 N > 5081.35-1.00 S No recovery. 1.20 (1.30)15 0 80.05-2.30 Non intact recovered as grey mottled greyish brown gravel of 79.98 (0.07)С 2.50 N >50 2.50 LIMESTONE. 2 37 NA (CORNBRASH FORMATION) (0.61)Firm to stiff brown and bluish grey mottled yellowish brown and 79.37 2.98 greyish brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. 55 C 3.28 -(CORNBRASH FORMATION) 3.37 Between 2.37m and 2.50m bgl: no recovery At 2.72m bgl: 1No. coarse subangular gravel of limestone. Weak light grey mottled grey and bluish grey thinly to very thinly bedded LIMESTONE. Occasionally silty. 4.00 (CORNBRASH FORMATION) 70 (2.29)At 3.16m bgl: subhorizontal fracture with coarse sand infill <1mm on 320 fracture surface. Between 3.53m to 3.65m bgl: band of greenish grey slightly silty clay. 4.56 -С 67 At 3.62m bgl: rare pocket of black bioturbated clay.

Between 3.81m and 3.87m bgl: band of grey silty slightly gravelly clay. 4.67 43 32 Gravel is fine to medium angular to subrounded limestone 5.01 -С Between 4.00m and 4.49m bgl: no recovery. Between 4.78m and 4.87m bgl: band of dark grey silty gravelly clay. 5.22 77.08 5.27 Gravel is fine to coarse subangular to subrounded limestone. С 5.23 -Between 5.14m and 5.17m bgl: pockets of dark brown bioturbated clay. 5.50 5.32 Firm to stiff greenish grey mottled light grey CLAY with rare gravel. Gravel is fine to medium subrounded to rounded limestone. Rare lenses of black and dark brown bioturbated 99 54 (CORNBRASH FORMATION) 46 7.00 Between 7.00m and 7.31m bql: no recovery. (3.80)NA Between 7.31m and 7.87m bgl: band of extremely strong light grey limestone. 79 29 Between 8.08m and 8.31m bgl: occasional yellowish brown mottling. Between 8.54m and 8.66m bgl: band of very soft (drilling induced). Between 8.74m and 8.85m bgl: becoming extremely weak/ very stiff greenish grey mudstone/clay.

Installation: 50mm diameter standpipe installed to 11.50m bdl.

9.61 -

9.73

С

100

33

33

10.00

73.28-

9.07

speckling.

Remarks: Borehole backfilled with arisings on completion.

		Groundwater Strikes			Drilled: Dynamic
Depth Strike 9.50	Rise 7.60	Remarks	Cased 2.50	Sealed	Sampling (UK) Ltd Logged: ST
					Checked: AP

Diameter: 120mm to 11.50m

Between 9.03m and 9.07m bgl: green clay pockets with fine pyrite

Very weak brownish grey mottled light grey and bluish grey

Continued next sheet

Between 8.90m and 8.93m bgl: pyrite speckling.

LIMESTONE. Rarely fossiliferous.

(CORNBRASH FORMATION)



Start

R3

1:50

Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 2 of 2

End 29/08/2018 **Ground Level** 82.35m AOD **Total Depth** 11.50m

E 456389.42 N 222879.19

Scale

Coordinates

Very weak brownish grey mottled light grey and bluish grey LIMESTONE. Rarely fossiliferous. (CORNBRASH FORMATION) Between 9.30m and 9.36m bgl: non intact, recovered as medium to coarse angular to subrounded gravel of limestone. Between 9.72m and 10.00m bgl: subvertical fracture with bluish grey staining on fracture surface. Between 10.00m and 10.09m bgl: band of greenish grey and black mottled clay. At 10.09m bgl: band of very silty clay.	(III) RQD Type (III) (IIIAOD)	y mottled light grey and bluish grey ssiliferous. TION) bgl: non intact, recovered as medium to ed gravel of limestone.	nd GW	Install
Very weak brownish grey mottled light grey and bluish grey LIMESTONE. Rarely fossiliferous. (CORNBRASH FORMATION) Between 9.30m and 9.36m bgt. non intact, recovered as medium to coarse angular to subrounded gravel of limestone. Between 10.00m and 10.00m bgl: subvertical fracture with bluish grey staining on fracture surface. Between 10.00m and 10.09m bgl: band of greenish grey and black mottled clay. At 10.09m bgl: band of very silty clay. Between 10.86m and 10.95m bgl: band of stiff bioturbated clay. Between 10.37m and 11.37m bgl: pocket of black bioturbated clay. Between 11.31m and 11.37m bgl: non intact, recovered as medium to coarse angular to subrounded gravel of silty limestone.	Very weak brownish green LIMESTONE. Rarely for (CORNBRASH FORMAT) 100 NI	ssiliferous. TION) bgl: non intact, recovered as medium to ed gravel of limestone.		
		m bgl: subvertical fracture with bluish grey m bgl: band of greenish grey and black silty clay. m bgl: subvertical fracture. m bgl: band of stiff bioturbated clay. m bgl: pocket of black bioturbated clay. m bgl: non intact, recovered as medium to gd gravel of silty limestone.		

Installation: 50mm diameter standpipe installed to 11.50m

bgl. **Remarks:** Borehole backfilled with arisings on completion.

		Groundwater Strikes	i		Drilled: Dynamic
Depth Strike	Rise	Remarks	Cased	Sealed	Sampling (UK) Ltd
9.50	7.60		2.50		Logged: ST
					Checked: AP



Start

R4

1:50

Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 2

Coordinates

End 23/08/2018 **Ground Level** 82.90m AOD **Total Depth** 11.50m

E 456440.00 N 223054.00

Scale

Depth TCR If Toes To
1.20
1.20
1.20
1.20
1.20
2.50 C
2.50 C
2.50 2.50 N > 50 R
2.50 C 2.50 N > 50 NA NA NA NA NA NA NA NA NA N
2.50 NA OC 2.50 N > 50 OC 330 OC 4.00 - 4.14 - 4.25 OC 4.14 - 4.25 OC 4.14 - 4.25 OC 30 OC 4.14 - 4.25 OC 30 OC 4.14 - 4.25 OC 4.14 - 4.25 OC 4.15 - 4.15 - 4.25 OC CORNBRASH FORMATION) OC 3.50 OC 4.10 - 4.10 - 4.25 OC 4.10 - 4.10 - 4.25 OC 6.10 OC 78.58 - 4.32 OC 1.18) OC 1.18 OC 5.50 OC 5.52 - 5.91 OC 5.52 - 5.91 OC 5.50 - 5.91 OC 5.50 - 5.91 OC 5.50 - 5.91 OC 5.82 - 5.91 OC 6.10 OC 77.40 5.50 OC 6.10 OC 78.58 - 70 OC 77.40 5.50 OC 77.40 5.50 OC 6.10 OC 78.58 - 70 OC 77.40 5.50 OC 77.40 5.50 OC 6.10 OC 78.58 - 70 OC 77.40 5.50 OC 78.82 - 70 OC 77.40 5.50 OC
2.50 NA NA NA NA NA NA NA NA NA N
4.00 NI C 4.14 - 4.25
Stiff to very stiff greyish brown and greenish grey CLAY with frequent orange staining and black mottling - possible bioturbation. (CORNBRASH FORMATION) NI
frequent orange staining and black mottling - possible bioturbation. (CORNBRASH FORMATION) Weak thinly to medium bedded dark grey mottled greenish grey clay. 4.00 NI 4.00 A.00 C 4.00 - 4.07 C 4.14 - 4.25 A.25 NA (1.18) (1.18) To a compare the following a compared to the properties of th
4.00 NI C -4.00 - 330 C -4.14 - 4.25 P7 64 S9 NA C -5.50 NI C -5.82 - 70 85 150 66 61
Weak thinly to medium bedded dark grey mottled greenish grey fossiliferous LIMESTONE. (CORNBRASH FORMATION) 85 150 66 61
4.00
85 C 4.14 - 4.25 97 64 59 NA NA
88tween 4.18m and 4.18m bgl: band of soft light brownish grey clay with occasional pockets of black bioturbated clay. 800 Between 4.18m bgl: band of dark grey silty clay. Stiff to very stiff brownish grey mottled greenish grey CLAY with occasional black mottling - possible bioturbation. Rare pockets of light grey silty clay. (CORNBRASH FORMATION) Very weak light brownish grey calcareous MUDSTONE. (CORNBRASH FORMATION) 85 150 66 61
5.50 NA To be the control of the c
5.50 NI C SESS 150 NI C SESS 150 NI Between 6.07m and 6.12m bgl: band of soft light brownish grey clay. Between 6.30m and 6.33m bgl: band of soft light brownish grey clay. Between 6.30m and 6.33m bgl: band of soft light brownish grey clay. Between 6.30m and 6.33m bgl: band of soft light brownish grey clay.
5.50 NI C 5.82 - 5.91 85 150 66 61
5.50 Very weak light brownish grey calcareous MUDSTONE. (CORNBRASH FORMATION) 85 150 66 61
NI C 5.82 - 5.91
NI
85 150
Between 6.30m and 6.33m bgl: band of soft light brownish grey clay.
76.39 6.51 West light revel IMESTONE
520 - 70.39 Weak light grey LIMESTONE. - - - - - - - - -
75.87 7.03 Soft to firm dark grey CLAY. (CORNBRASH FORMATION)
┃
86 NA E (1.01)
41 41 Between 7.77m and 8.04m bgl: becoming slightly silty.
74.86 8.04 Between 7.95m and 7.99m bgl: band of very silty clay. Very weak brownish grey micaceous MUDSTONE with
74.62 8.28 frequent black mottling - possible bioturbation.
8.50 (CORNBRASH FORMATION) Between 8.13m and 8.17m bgl: band of dark greenish grey CLAY.
Weak dark grey mottled grey, light grey and bluish grey
95 190 - (CORNBRASH FORMATION)
Between 8.50m and 8.66m bgl: band of greenish grey silty clay. Between 9.21m and 9.76m bgl: subvertical fracture rough undulating with
greenish grey staining.
C 9.75 9.79 Garage Gar
10.00 Between 9.09 and of back and dark grey moded

Installation: 50mm diameter standpipe installed to 11.50m

bgl. **Remarks:** Borehole backfilled with arisings on completion.

	Groundwater Strikes										
Depth Strike 8.50	Rise 0.00	Remarks	Cased		Drilled: Dynamic -Sampling (UK) Ltd Logged: ST						
					Checked: AP						



BOREHOLE LOG - ROTARY

R4

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 2 of 2

 Start
 23/08/2018
 Coordinates
 E 456440.00 N 223054.00
 Scale
 1:50

End			/08/2018		Git	ouna Le		82.90m AOD Total Depth			11.50m
Depth (m)	TCR SCR RQD	lf	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
	105 89 89	If	Sample	Depth		Level	Strata Depth (thickness) (m)		Legend		

Installation: 50mm diameter standpipe installed to 11.50m bol

bgl. **Remarks:** Borehole backfilled with arisings on completion.

		Groundwater Strikes			Drilled: Dynamic
Depth Strike 8.50	Rise 0.00	Remarks	Cased	Sealed	Sampling (UK) Ltd
					Checked: AP



Start

R5

1:50

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 2

E 456423.00 N 223153.00

Scale

Coordinates

Ellu			100/2010			Juliu Le		10tal Deptil			12.0	
Depth (m)	TCR SCR RQD	If	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Inst	tall
				_		83.73	(0.20)	Topsoil - driller's description. (TOPSOIL)				
				_		-		CLAY with Cornbrash (limestone) - driller's description.	<u> </u>	-	<u> </u>	=-1
1				=		=			<u> </u>		$\vdash \exists$	曰
1				_		=	(1.30)		 	1	<u> </u>	
1			S	_ 1.00	N >50		(1.30)				L	
1			_	_					<u> </u>	1	H	\equiv
1				E]			[- <u>-</u> -		-	=
1.50				F		82.43	1.50	No recovery.	 	ł	<u> </u>	
1				_		-		No recovery.			-	
1				_		=	(0.78)		H		<u> </u>	
1	49			_		=	` ,		[-]		<u> </u>	
1	27			_		81.65	2.28		<u> </u>		L	
1	24	NA		_		81.57_	(80.0)	Soft dark grey CLAY.			-	\equiv
1						81.46-	2.36	\((CORNBRASH FORMATION) Soft brown mottled light grey CLAY.			-	=
1			С	2.72 -] =	(0.11)	(CORNBRASH FORMATION)			<u> </u>	
3.00			С	- 2.79 - 3.00	N >50		2.47	Weak to medium strong light grey mottled bluish grey thinly to	H		H	\equiv
1			O	_ 0.00	11750	=		very thinly bedded LIMESTONE with light brown staining along			<u> </u>	=
1		NI	С	_ 3.33 -				fracture surfaces. Rare lenses of black and dark brown	HHH	-	드	
1	92	190		— 3.40		_	(2.19)	bioturbated clay.			H	=-1
1	67	580	С	3.53 -		-	(=:::)	(CORNBRASH FORMATION)	HHH	1	$\vdash \exists$	\equiv
1	31			_ 3.61] =		Between 2.47m and 2.62m bgl: non intact, recovered as slightly silty slightly clayey subrounded coarse gravel.				
1				_		_		At 2.76m bgl: subhorizontal fracture with light brown staining 2-4mm			L	
1				_		=		thick. At 2.84m bgl: subhorizontal fracture with light brown penetrative staining			Н	\equiv
4.50				_		=		around fracture and orange staining on fracture surface.	HHH	1	-	=
1.00				E		79.27	4.66	Between 3.00m and 3.05m bgl: band of bluish grey slightly sandy clay.				=
1				_		-		At 3.63m bgl: pocket of black bioturbated clay 3mm x 25mm. Between 3.85m and 3.88m bgl: band of black and dark brown lenses of	F	-	-	\Box
1				_		-		bioturbated clay 3mm x 30mm.			<u> </u>	
1	21 15			_		=	(1.01)	Between 4.07m and 4.20m bgl: occasional lenses of dark brown		ŀ	<u> </u>	=
1	15			_		=		bioturbated clay 1mm x 4mm. Between 4.23m and 4.32m bgl: band of soft (34kpa HSV - drilling	L	1	_	=
1			С	 - 5.61 -		=		disturbed) dark grey sandy silty clay.		ł		\equiv
1		NA	C	5.83		78.26	5.67	No recovery.	╆┯╃	1	<u> </u>	
6.00		INA		_		78.04-	(0.22) 5.89	Strong thinly to medium bedded LIMESTONE. Rare lenses of		ł	<u> </u>	==
0.00				=		_	5.69	black and dark brown bioturbated clay.	/[H	
1				_				\((CORNBRASH FORMATION)\) Stiff greenish grey CLAY.		1	<u> </u>	
1				_		=	(1.08)	(CORNBRASH FORMATION)	F_=_	-	_	\vdash
	100 84					=		Between 6.32m and 6.46m bgl: band of very soft to soft clay.		1	$\vdash \Box$	日
	84		С	- - 6.88 -				Between 6.55m and 6.83m bgl: occasional lithorelicts of light grey limestone.	<u> </u>	1		H
] .	NI	_	7.06		76.96	6.97	Between 6.93m and 6.97m bgl: drilling disturbed.		1	\vdash	目
		100		E] =	(0.53)	Weak light grey LIMESTONE.			H_{\perp}	터
7.50	L	400		L		76.42	7 FO	(CORNBRASH FORMATION)		_		目
7.50				F		76.43	7.50	Very soft (drilling disturbed) greenish grey and bluish grey	E]	H	目
				F				mottled CLAY.	<u> </u>	-	$\vdash \Box$	日
1				Ľ.			,, ·=·	(CORNBRASH FORMATION)	L	1		터
1	99	NA		_			(1.17)	At 8.11m bgl: black bioturbated clay.	F_=_	-		
1	19 19			L				,			H	==
	19			H		-			<u> </u>	1	\Box	曰
				F		75.26	8.67	∖ Brownish grey clayey SILT.	 	1		曰
				F		75.22	(0.04)	(CORNBRASH FORMATION)			H	팀
9.00				_		=	8.71	Weak bluish grey mottled light grey LIMESTONE.	-	1		
1	4.5.5			<u> </u>				(CORNBRASH FORMATION)				::
1	100 58		С	- 9.38 -		-		Between 9.06m to 9.31m bgl: Band of very stiff greenish grey slightly silty		1]: : l
	53			9.81		7		CLAY. At 9.23m bgl: bivalve fossil.				
				F		7		Between 9.42m and 9.55m bgl: fossiliferous.				
				L				At 9.78m bgl: subhorizontal fracture.				J
								Continued next sheet		Щ_	Щ	

Installation: 50mm diameter standpipe installed to 12.00m bgl.

bgl. **Remarks:** Borehole backfilled with arisings on completion.

	Groundwater Strikes										
Depth Strike 7.30	Rise 7.30	Remarks	Cased	Sealed	- Drilled: Dynamic - Sampling (UK) Ltd Logged: ST						
					Checked: AP						



BOREHOLE LOG - ROTARY

R5

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 2 of 2

 Start
 21/08/2018
 Coordinates
 E 456423.00 N 223153.00
 Scale
 1:50

Ellu			100/2010			Juliu Le		65.95III AOD Iotal Deptil			12.00111
Depth (m)	TCR SCR RQD	If	Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
10.50	97	NI 290 650	С	- - - - - - - - - - - - - - - - - - -		-	(3.29)	Weak bluish grey mottled light grey LIMESTONE. (CORNBRASH FORMATION) At 9.90m bgl: subhorizontal fracture. At 10.18m bgl: fracture at 45 degrees. Between 10.61m and 10.76m bgl: fracture at 45 degrees with black clay infill <1mm.			
12.00	61 51			- - - - -		71.03	12.00	Between 11.41m and 12.00m bgl: frequent pockets of black bioturbated clay. Between 11.41m and 11.43m bgl: band of greenish grey very silty clay.			
12.00						71.93	12.00	End of Borehole at 12.00m			er 1º t o.

Installation: 50mm diameter standpipe installed to 12.00m

bgl. **Remarks:** Borehole backfilled with arisings on completion.

ĺ		•	Groundwater Strikes		•	Drilled: Dynamic
- [Depth Strike	Rise	Remarks	Cased	Sealed	Sampling (UK) Ltd
- 1	7.30	7.30				Gampling (GR) Etd
- 1						Logged: ST
١						Checked: AP
- 1						Checked. Ar



Sample

/ Test

Туре

Depth

Start

Depth

TCR SCR

RQD

lf

R₆

1:50

Install

GW

Legend

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

E 456523.00 N 223314.00

Scale

Description of Strata

Coordinates

Level

(mAoD)

Result

Strata Depth

(0.20)Topsoil - driller's description. 83 72 0.20 (TOPSOIL) Cornbrash (limestone) - driller's description. (0.80)1.00 N > 5082 92 1.00 S Very stiff brown CLAY - driller's description. (0.50)1.50 C 1.50 N >50 82.42-1.50 No recovery. (0.93)35 17 17 81.49_ 2.43 Soft brown mottled greyish brown and orangish brown slightly NΑ (0.41)sandy silty CLAY. 81.08 2.84 (CORNBRASH FORMATION) 3.00 Between 2.74m and 2.78m bgl: band of brown slightly clayey slightly 3.00 С N >50 80.92 (0.16)NA sandy medium to coarse subrounded to rounded gravel of limestone. 3.00 At 2.82m bgl: pocket of dark grey clay (20mm x 40mm) 80.63-С 3.32 -(0.29)Very weak light grey mottled greenish grey LIMESTONE. 3.38 3.29 (CORNBRASH FORMATION) 79 С 3.73 -No recovery. NI 58 At 3.23m bgl: band of orange staining (2mm thick). 26 100 3.81 (1.21)580 Weak grey mottled brownish grey and light grey very thinly to С 4.10 thinly bedded LIMESTONE. Rare black mottling - possible 4.16 bioturbation. (CORNBRASH FORMATION) 4.50 C 4 50 N > 5079 42 4 50 Between 3.73m and 3.75m bgl: non intact, recovered as coarse subrounded to rounded limestone gravel Between 3.85m and 3.91m bgl: band of clayey silty limestone. NA (0.90)Between 4.49m and 4.45m bgl: band of very stiff grey clay. 39 No recovery. 21 С 5.34 -11 78.52 5.40 Weak grey mottled bluish grey LIMESTONE. 5.51 NI (CORNBRASH FORMATION) (0.60)160 С 5.74 -Between 5.56m and 5.69m bgl: band of dark grey silty clay. 290 5.82 6.00 77.92 6.00 Between 5.98m and 6.00m bgl: band of stiff grey clay.

End of Borehole at 6.00m С 5.84 -5.91 С N > 506.00

Installation: 50mm diameter standpipe installed to 6.00m bgl.

Remarks: Borehole backfilled with arisings on completion.

	Groundwater Strikes										
Depth Strike	Rise	Remarks	Cased	Sealed	Drilled: Dynamic Sampling (UK) Ltd Logged: ST						
					Checked: AP						

Diameter: 120mm to 6.00m



SPT SUMMARY SHEET

Project: Howes Lane, Bicester **Client:** Albion Land Two Ltd

Project No: AG2873-18

No.	ole (m)	m (m)	ور (m)	evel	ent	Se	eatin	g Dri	ive				Т	est I	Drive	Э			ype	Ф
Borehole	Borehole depth (m)	Bottom depth (n	Casing depth (m	Water Le (m)	Equipment ref.	Blo)WS		en m)		Blo	ws		F	Pen	(mm	1)	Total Pen (mm)	Test Ty	N Value
R1	1.50	1.95			GC.01	8	11	75	75	12	12	13	13	75	75	75	70	295	S	>50
R1	3.00	3.04			GC.01	25		10		50				30				30	C	>50
R2	1.00	1.45			GC.01	6	8	75	75	9	9	10	11	75	75	75	75	300	S	39
R2	2.50	2.81			GC.01	8	14	75	75	17	20	13		75	75	10		160	С	>50
R3	1.00	1.11			GC.01	25		40		50				65				65	S	>50
R3	2.50	2.83			GC.01	7	14	75	75	20	22	8		75	75	30		180	С	>50
R4	1.00	1.20			GC.01	17	8	75	40	40	10			75	10			85	S	>50
R4	2.50	2.88			GC.01	11	13	75	75	15	15	19	1	75	75	75	0	225	С	>50
R5	1.00	1.16			GC.01	25		60		36	14			75	20			95	S	>50
R5	3.00	3.39			GC.01	11	12	75	75	14	14	12	10	75	75	75	10	235	С	>50
R6	1.00	1.14			GC.01	25		50		36	14			75	10			85	S	>50
R6	1.50	1.68			GC.01	20	5	75	30	41	9			75	0			75	С	>50
R6	3.00	3.03			GC.01	25		10		50				20				20	С	>50
R6	4.50	4.52			GC.01	25		0		50				20				20	С	>50
R6	6.00	6.06			GC.01	25		10		50				50				50	С	>50

Notes:

- 1. Test carried out in general accordance with BS EN ISO 22476-3:2005
- 2. N values have not been subjected to any correction.
- 3. Test carried out using split spoon S, or solid cone C.





Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005



Dynamic sampling uk Itd 5-8 victory parkway victory road Derby **DE24 8ZF**

Hammer Ref:

GC.01

Test Date:

18/05/2018

Report Date:

22/05/2018

File Name:

GC.01.spt

Test Operator:

A.PARKER.

Instrumented Rod Data

Diameter d_r (mm):

54

Wall Thickness t_r (mm):

6.9

Assumed Modulus Ea (GPa): 208

Accelerometer No.1:

Accelerometer No.2:

Hammer Information

Hammer Mass m (kg): 63.5

760

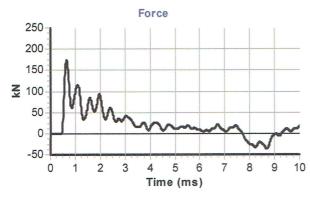
Falling Height h (mm): String Length L (m):

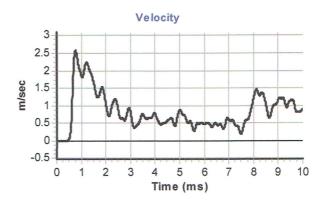
15.0

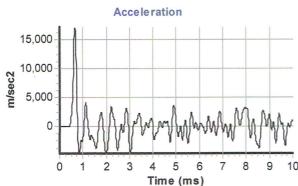
Comments / Location

Rotory hammer tested at Dynamic

samplings yard.









Calculations

Area of Rod A (mm2):

1021

Theoretical Energy E_{theor} (J):

473

Measured Energy E_{meas}

274

(J):

Energy Ratio E_r (%):

58

Signed: A.parker. Title: Associate Director.

The recommended calibration interval is 12 months

ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 17/08/2018 **Scale** 1:25

Ground I	Levei	85.32m AC	טע		rdinates	E 456117.00 N 222901.00 Total Depth	ı	.15m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
-	- - - - - -		85.07	(0.25) 0.25 (0.90)	E H/VH	Crops over soft dark brown gravelly silty CLAY with frequent rootlets and occasional roots <5mm. Gravel is fine to coarse subrounded to rounded limestone. (TOPSOIL) Very weak to weak thinly bedded bluish grey mottled light grey LIMESTONE recovered as orangish brown silty sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Frequent cobbles of limestone. (CORNBRASH FORMATION)		
	- - - -		84.17_	1.15	_	End of Trial Pit at 1.15m		=
	- - -		- - - -					
	- - 		- - -					
	- - -		- - -					
	- - -		- - -					
	- - -		- - -					
	- - -		_ - - -					
	- -		- - -					
	- - -		- - - -					
	- - -		- - - -					

Method: Backhoe excavator

Groundwater: Groundwater not encountered.

Stability: Stable.

Remarks: Trial pit terminated at 1.15m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.50m

Width: 0.70m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 17/08/2018 Scale 1:25

Coordinates

Ground Level 85.70m AOD **Total Depth** 2.10m E 456112.00 N 222950.00

Ground		03.70III AC			umate	5 E 430 112.00 N 222330.00 Iolai Deptii		. 10111
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
71	-		-	(0.30)	E	Crops over soft dark brown slightly sandy gravelly silty CLAY with frequent rootlets and roots <5mm. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL)		
	- - -		85.40- - - 85.10-	0.30 (0.30) 0.60	Н	Very weak thinly bedded bluish grey mottled grey LIMESTONE recovered as orangish brown slightly sandy clayey gravel. Gravel is fine to coarse angular to subrounded limestone. Occasional cobbles of subangular limestone. (CORNBRASH FORMATION)		
	_ _ _		- - -			Soft to firm friable light brown sandy silty CLAY. (CORNBRASH FORMATION)	^x xx xx	
	_			(1.30)	М		^X XX XX	
HV	- - - 1.60	Cu = 117	- - -			From 1.60m bgl: stiff.	X———X X————X X————————————————————————	
HV	_ _ 2.00	Cu = 120	83.80-	1.90 (0.20)	M	Stiff bluish grey mottled orangish brown sandy CLAY. (CORNBRASH FORMATION)		
	- - -		83.60-	2.10	IVI	End of Trial Pit at 2.10m		
	_		_ _ _					
	- -		_ _					
	- - -		- - -					
	- - -		- - -					
	_		-					
	- - -		- - -					
	_ _ _		- - -					

Method: Backhoe excavator

Groundwater: Moderate seepage at base.

Stability: Stable.

Remarks: Trial pit terminated at 2.10m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.30m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 16/08/2018 **Scale** 1:25

Ground Level 86.16m AOD Coordinates E 456137.72 N 223016.88 Total Depth 2.60m

Ground	Levei	86.16m A0	טט	Coo	rdinate	s E 456137.72 N 223016.88 Total Depth	2	.60m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
.,,,,,	_		-	(0.30)	E	Crops over soft dark brown slightly gravelly silty CLAY with frequent rootlets and roots <7mm. Gravel is fine to medium subrounded limestone. (TOPSOIL)		
	- - - -		85.86- - - -	(0.60)	Н	Very weak thinly bedded grey LIMESTONE recovered as orangish brown slightly sandy clayey gravel. Gravel is fine to coarse subangular to subrounded limestone. Frequent subangular cobbles of limestone. (CORNBRASH FORMATION)		
ES	_ 1.00		85.26-	0.90 (0.20)		Soft to firm brown sandy CLAY. (CORNBRASH FORMATION)		
	- - -		85.06- - - -	1.10	M	Soft to firm light brown sandy slightly gravelly CLAY. Gravel is fine to medium subrounded to rounded limestone. (CORNBRASH FORMATION)		
	- - -		-	(1.50)	М			
HV	2.00 - - -	Cu = 112	-			From 2.00m bgl: stiff. Between 2.00m and 2.30m bgl: band of bluish grey mottled orangish brown clay.		0
D	- 2.40 -		83.56-	2.60				
	- - - - - - - - - - - - - - - - - - -					End of Trial Pit at 2.60m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.60m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

ClientAlbion Land Two LtdSheet1 of 1

Date 16/08/2018 **Scale** 1:25

Ground	Levei	86.44m AC	טכ	C00	rdinates	E 456146.52 N 223055.27 Lotal Depth		.40m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
	- - - - -		86.16_	(0.28) 0.28 (0.82)	E	Crops over soft dark brown sandy slightly gravelly silty CLAY with frequent rootlets and roots <5mm. Gravel is fine to coarse subangular to rounded limestone. (TOPSOIL) Very weak very thinly to thinly bedded LIMESTONE recovered as orangish brown slightly clayey sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Frequent angular to subangular cobbles of limestone. (CORNBRASH FORMATION)		
			85.34- - - -	1.10	_	Soft to firm yellowish brown sandy gravelly CLAY. Gravel is fine to medium subangular to subrounded limestone. (CORNBRASH FORMATION)		
HV	- - - - 1.90	Cu = 86	- - - 84.44	2.00	M	From 1.90m bgl: stiff.		
HV	- - - 2.30	Cu = 119	84.04-	(0.40)	М	Firm becoming stiff bluish grey mottled orangish brown slightly sandy CLAY. (CORNBRASH FORMATION)		

Method: Backhoe excavator

Groundwater: Very slight seepage at 2.60m bgl in southwest corner.

Stability: Stable.

Remarks: Trial pit terminated at 2.40m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.40m

Width: 0.75m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 16/08/2018 **Scale** 1:25

Ground Level 86.40m AOD **Coordinates** E 456157.23 N 223112.45 **Total Depth** 1.20m

Ground	Level	86.40m AOE			rdinates	E 456157.23 N 223112.45 Total Depth	1	.20m
Sample / Test Type	Depth (m)	Result (r	Level mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
D	- 0.25 - - -	8	86.10-	(0.30) 0.30 (0.90)	E	Crops over soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets and roots <8mm. Gravel is fine to medium angular to subrounded limestone. (TOPSOIL) Very weak thinly bedded light grey mottled bluish grey LIMESTONE recovered as orangish brown silty sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Occasional subangular to subrounded cobbles of limestone. (CORNBRASH FORMATION)		
В	- 0.90 							
	_	8	85.20	1.20		From 1.15m bgl: becoming weak. End of Trial Pit at 1.20m		=
	<u>-</u>							
	- - -							
	-		-					
	- -		-					
	- - -							
	-		-					
	- -		-					
	-		-					
	- - -		-					
	_ _		=					
			-					
	_ _ _		=					
	_							
	 - -		=					
	_							

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 1.20m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 16/08/2018 **Scale** 1:25

 Ground Level
 86.56m AOD
 Coordinates
 E 456172.00 N 223170.00
 Total Depth
 2.60m

Ground	Level	86.56m AC	DD	Coo	rdinates	E 456172.00 N 223170.00 Total Depth	2	2.60m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
.,,,,	_		-	(0.30)	E	Crops over soft dark brown sandy slightly gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL)		
	_ _ _		86.26-	0.30 (0.50)	Н	Very weak thinly bedded light grey LIMESTONE recovered as orangish brown slightly sandy clayey fine to coarse angular to subrounded limestone gravel. Frequent subangular cobbles of limestone. (CORNBRASH FORMATION)		-
	_ _ 		85.76- - - -	0.80		Soft to firm light brown sandy slightly gravelly CLAY. Gravel is fine to medium subangular to subrounded limestone. (CORNBRASH FORMATION)		मा प्राची
			- - - - -	(1.80)	М			
			- - - -	(1.00)		At 1.70m bgl: band of soft bluish grey clay in southern half of pit.		
	_		- - 83.96-	2.60				100
	_ _ _		-			End of Trial Pit at 2.60m		
	 		 - -					
	_		- - -					
	_		- - -					
	_ 		- -					
	-		- - -					
	_ _ _		- - -					
			<u>-</u>					

Method: Backhoe excavator

Groundwater: Slight seepage at 2.50m bgl.

Stability: Stable.

Remarks: Trial pit terminated at 2.60m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.30m

Width: 0.70m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Ground Lovel 85 22m AOD Coordinates E 456270 80 N 223166 70 Total Donth 2 75m

Scale

1:25

Ground	Level	85.22m AC	DD		rdinate	s E 456279.89 N 223166.79 Total Depth	2	.75m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- - 0.25		-	(0.35)	E	Crops over soft dark brown slightly sandy gravelly CLAY with frequent rootlets and roots <5mm. Gravel is fine to medium subrounded to rounded limestone. (TOPSOIL)		
	_		84.87	0.35		Very weak thinly bedded bluish grey LIMESTONE recovered as orangish brown silty sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Occasional subangular cobbles of limestone.		
	_		-	(0.55)	Н	(CORNBRASH FORMATION)		
	- - - -		84.32-	0.90		Soft to firm light brown sandy gravelly CLAY. Gravel is fine to medium subangular to subrounded limestone. (CORNBRASH FORMATION)		
	- - - -		- - - -	(1.80)	М			
D	- 2.30 - -		- - -					
В	2.75 - - - - - -		82.52- 82.47_ - - - - - -	2.70 (0.05) 2.75	VH	Weak light brown LIMESTONE recovered as 2No cobbles. (CORNBRASH FORMATION) End of Trial Pit at 2.75m		
	- - - - -		- - - - -					
	_ _ _ _		- - - -					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit terminated at 2.75m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Cround Lovel 95 14m AOD Coordinates E 456247 00 N 222104 00 Total Booth 4 40m

Scale

1:25

Ground	Level	85.14m AC	DD	Coo	rdinate	E 456247.00 N 223104.00 Total Depth	4	.40m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- - - - - - - 0.70		84.84-	(0.30) 0.30 (0.60)	E	Crops over soft dark brown gravelly silty CLAY with frequent rootlets and roots. Gravel is fine to medium subangular to subrounded limestone and quartzite. (TOPSOIL) Soft dark brown mottled yellowish brown and black silty gravelly CLAY with frequent rootlets. Gravel is fine to medium subangular to rounded mixed lithologies including limestone, sandstone and quartzite. (CORNBRASH FORMATION)		1.61 1.62 1.62 1.62 1.63 1.6
	- - - - - - - -		84.24-	0.90	M	Soft to firm light brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium subangular to rounded limestone. (CORNBRASH FORMATION)		
D HV	- 2.30 - 2.40 	Cu = 102	- - - - - - 81.94-	3.20		Firm becoming stiff bluish grey CLAY. Occasional pockets of black bioturbated		10 10 10 10 10 10 10 10 10 10 10 10 10 1
HV D	- 3.60 - 3.90 	Cu = 120		(1.20)	Н	clay. (CORNBRASH FORMATION)		
	- - - -		- - - -			End of Trial Pit at 4.40m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit backfilled with arisings on completion.

Length: 2.60m **Width:** 0.80m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Level	85.53m AC	DD	Coo	rdinate	s E 456218.00 N 223047.00 Total Depth	4	.20m
Depth (m)	Result	Level (mAoD)	Strata Depth (thickness)	Ease of Dig	Description of Strata	Legend	GW
-		85.23- -	(0.30)	Е	Crops over soft dark brown slightly sandy gravelly silty CLAY with frequent rootlets and roots. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak thinly bedded bluish grey LIMESTONE recovered as orangish brown and brownish grey mottled silty clayey gravel. Gravel is fine to coarse angular to subrounded limestone. Rare cobbles of limestone.		TO THE TOTAL OF TH
- - - - - -		84.63-	0.90	Н	(CORNBRASH FORMATION) Soft to firm light brown silty gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. Occasional subrounded cobbles of limestone. (CORNBRASH FORMATION) From 1.40m bgl: becoming slightly gravelly.		
- 1.60 	Cu = 85	- - - - - - -	(2.20)	М	From 1.60m bgl: stiff.		으러 타고 나타고 나타고 나타고 나타고 나타고 나타고 나타고 나타고 나타고
- - - - - - -		82.43- - - 82.03-	3.10 (0.40) 3.50	Н	Firm light grey mottled orangish brown slightly sandy CLAY. (CORNBRASH FORMATION) Firm to stiff bluish grey mottled orangish brown slightly sandy CLAY with rare pockets of black bioturbated clay <3mm.		
- - - - - - -		81.33-	(0.70)	Н	(CORNBRASH FORMATION) End of Trial Pit at 4.20m		
	Depth (m)	Depth (m) Result	Depth (m) Result Level (mAoD) -	Depth (m) Result (mAoD) (thickness) (m) (0.30) (1.3	Depth (m) Result Level (mAoD) Strata (thickness) of Dig (thickness) of Dig (thickness) Ease (thickness) of Dig (thickness) Ease (thick	Depth (m) Result Level (mAdD) Signary (mAdD) Easiegh of Dig	Depth (m) Result Level (mAcD) Description of Strata Description of Strata Logend (0.30) 8 (0

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit backfilled with arisings on completion.

Length: 2.70m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Ground Lovel 85 41m AOD Coordinates E 456108 14 N 223002 46 Total Donth 3 30m

Scale

1:25

Ground	Level	85.41m AOD	Coo	rdinate	s E 456198.14 N 223002.46 Total Depth	3	3.30m
Sample / Test Type	Depth (m)	Result Leve (mAoE		Ease of Dig	Description of Strata	Legend	GW
7	-	85.06	(0.35)	E	Crops over soft dark brown slightly gravelly sandy silty CLAY with frequent rootlets and rare roots <3mm. Gravel is fine to medium subrounded to rounded limestone. (TOPSOIL) Very weak very thinly to thinly bedded bluish grey mottled grey LIMESTONE recovered as orangish brown sandy clayey gravel. Gravel is fine to coarse angular to subrounded limestone. (CORNBRASH FORMATION)		
	- - -		(0.75)	Н	(CONTROLLER)		- - - - -
	- - - -	84.3	1.10		Soft to firm brownish grey mottled orangish brown slightly sandy silty CLAY. (CORNBRASH FORMATION)	X	마이크이크이크이크이
	- - - - -		- (1.20) 	M		X	
ES	- - - - 2.60	83.11	- 2.30 - -		Firm to stiff bluish grey CLAY with occasional pockets of black bioturbated clay. (CORNBRASH FORMATION)		±
	- - -		(0.95)	М			- - - -
В	- 3.20 - - - - - - - - -	82.16 82.11		VH	Weak light grey LIMESTONE recovered as gravelly clay with frequent cobbles of limestone. Gravel is fine to coarse angular to subangular limestone. (CORNBRASH FORMATION) End of Trial Pit at 3.30m		= = = = = = = = = = = = = = = = = = = =
	- - - - - -		- - - - - -				

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit terminated at 3.30m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.70m

Width: 0.80m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Ground Level 84.93m AOD Coordinates E 456159.19 N 222920.66 **Total Depth** 0.90m

Ground Level	84.93M AOD		rdinate	s E 456159.19 N 222920.66 Total Depth	0	.90m
Sample / Test Type Depth (m)	Result Level (mAoD	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
-		(0.30)	Е	Crops over soft sandy silty CLAY with frequent rootlets. (TOPSOIL)		
- - -	84.63	0.30		Very weak to weak bluish grey and light grey mottled LIMESTONE recovered as orangish brown sandy clayey gravel. Gravel is fine to coarse angular to subrounded limestone.		
-		(0.60)	VH	(CORNBRASH FORMATION)		
	84.03	0.90		End of Trial Pit at 0.90m		
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Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit terminated at 0.90m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.50m

Width: 0.75m



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Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Ground Level 84.93m AOD Coordinates E 456150.00 N 222895.00 Total Depth 0.80m

Ground	Level	84.93m AC	טט		rdinates	E 456150.00 N 222895.00 Total Depth	0	.80m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- - 0.20		84.63-	(0.30)	E	Crops over soft dark brown gravelly silty CLAY with frequent rootlets. Gravel is fine to coarse subrounded to rounded limestone. (TOPSOIL)		
	-		84.63	0.30 (0.50)	VH	Very weak to weak bluish grey and light grey mottled LIMESTONE recovered as orangish brown slightly slity slightly clayey sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Cobbles are subangular to subrounded limestone. (CORNBRASH FORMATION)		
В	0.75		84.13-	0.80	-	End of Trial Pit at 0.80m		1
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Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit terminated at 0.80m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.10m

Width: 0.70m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Ground Level 84 50m AOD Coordinates F 456197 71 N 222859 60 Total Donth 2 10m

Scale

1:25

Ground	Level	84.59m A0	DD	Coo	rdinate	s E 456197.71 N 222859.60 Total Depth	2	.10m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- 0.10 - -		84.34	(0.25) 0.25	E	Crops over soft dark brown gravelly silty CLAY with frequent rootlets and rare roots <5mm thick. Gravel is fine to coarse subangular to rounded limestone. (TOPSOIL) Very weak very thinly bedded bluish grey LIMESTONE recovered as brown mottled orangish brown sandy clayey gravel. Gravel is fine to coarse		
В	- - 0.50 - -			(0.85)	М	(CORNBRASH FORMATION) From 0.70m bgl: becoming slightly clayey slightly sandy gravel.		
	_ _ - -		83.49- 	1.10	,	Stiff light brown mottled yellowish brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (CORNBRASH FORMATION)		0
D	- - - - 1.80		- - -	(1.00)	Н			
HV	- 1.90 - -	Cu = 120	82.49- 	2.10		End of Trial Pit at 2.10m		
	- - - -		- - -					
	- - -							
	- - -		- - -					
	- - -		_ _ _ _					
	- - -		- - -					
	_ _ _		- - -					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

15/08/2018

Remarks: Trial pit terminated at 2.10m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.30m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Ground Level 84 76m AOD Coordinates E 456226 00 N 222946 00 Total Depth 3 10m

Scale

1:25

Ground L	Level	84.76m AC	DD	Coo	rdinate	s E 456226.00 N 222946.00 Total Depth	3	3.10m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
-	-		84.49_ - - - - - -	(0.27)	E	Crops over soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Reddish brown clayey gravelly SAND. Gravel is fine to medium subangular to subrounded limestone. Deeper in northern half of pit. (CORNBRASH FORMATION)		اً، عَلَى إِنْ عَمَّى إِنْ عَمْ إِنْ عَمْ أَنْ عَمْ أَنْ عَمْ أَنْ عَمْ أَنْ مُوْفِرُ وَمُوْفِرُ وَمُوْفِرُ وَ التعاليم التعاليم ال
D -	- - - - - -		- - - - - -	(1.63)				
	· ·		82.86- -	1.90		Soft to firm light brown mottled orangish brown slightly sandy CLAY. (CORNBRASH FORMATION)		
HV - - - -	- 2.30 - -	Cu = 79	- - - - 81.96-	(0.90)	М	From 2.30m bgl: stiff.		
HV -	- 3.00	Cu = 120	81.66-	(0.30)	М	Stiff bluish grey CLAY with occasional pockets of black bioturbated clay (<2mm) only present in northern part of pit. (CORNBRASH FORMATION) End of Trial Pit at 3.10m		
- - - - - - - - - - - - - - - - - - -			- - - - - - - - - -			End of Trial Pit at 3.10m		

Method:

Date

15/08/2018

Groundwater: Slight seepage from 2.90m bgl.

Stability: Stable.

Remarks: Trial pit backfilled with arisings on completion.

Length: 2.50m

Width: 0.60m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 15/08/2018 **Scale** 1:25

Ground L	_evel	84.60m AOD	Coo	rdinate	s E 456253.00 N 222971.00 Total Depth	2	.40m
Sample / Test Type	Depth (m)	Result Lev	vel Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES -	- 0.50		(0.70)	E	Crops over soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL)		
-		83.	-		Firm light brown sandy slightly gravelly CLAY. Gravel is fine to medium subangular to subrounded limestone. (CORNBRASH FORMATION)		
D	1.75		(1.70)	M			
		82.	20- 2.40		End of Trial Pit at 2.40m		
-	- - - -		- - - - - -				

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.40m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.90m

Width: 0.70m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Coordinates 84.68m AOD 4.00m **Ground Level** E 456272.70 N 223059.21 **Total Depth** Sample Depth Level Ease Legend Result GW Description of Strata / Test (mAoD) of Dig Туре Crops over soft dark brown sandy gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (0.30)Ε (TOPSOIL) 84.38-0.30 Very weak grey LIMESTONE recovered as orangish brown slightly sandy slightly clayey gravel. Gravel is fine to coarse angular to subrounded limestone. Frequent cobbles of angular to subangular limestone. (CORNBRASH FORMATION) (0.60)Н 83.78-0.90 Soft to firm light brown mottled orangish brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. Occasional subangular to subrounded cobbles of limestone. (CORNBRASH FORMATION) From 1.90m bgl: becoming slightly gravelly with no cobbles. (2.30)M 81.48-3.20 Firm to stiff bluish grey CLAY with occasional orangish brown mottling and rare pockets of black bioturbated clay. (CORNBRASH FORMATION) (0.80)M 80.68 4.00 End of Trial Pit at 4.00m

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

17/08/2018

Remarks: Trial pit backfilled with arisings on completion.

Length: 2.70m

Width: 0.80m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Ground Level 84.71m AOD Coordinates E 456281.00 N 223100.00 Total Depth 0.70m

Ground	Level	84.71m AO	D	Cool	rdinate	E 456281.00 N 223100.00 Total Depth	0).70m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
	- - -		84.46	(0.25) 0.25 (0.45)	E	Crops over soft dark brown slightly sandy gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak to weak light grey mottled bluish grey LIMESTONE recovered as slightly clayey sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Frequent angular to subangular cobbles of limestone (CORNBRASH FORMATION)		N.V.V.
	_		_					
	_		84.01-	0.70		End of Trial Pit at 0.70m		
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Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

22/08/2018

Remarks: Trial pit terminated at 0.70m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.10m

Width: 0.70m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 15/08/2018 Scale 1:25

84 50m AOD Cround Lovel Total Donth 2 20m Coordinates E 456240 00 N 222445 00

Ground	Level	84.50m A0	DD	Coo	rdinate	s E 456340.00 N 223145.00 Total Depth	2	2.30m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
	-		84.30- - - - -	(0.20) 0.20 (0.60)	E	Soft dark brown gravelly silty CLAY. (TOPSOIL) Very weak thinly bedded bluish grey LIMESTONE recovered as orangish brown clayey sandy gravel. Gravel is fine to coarse subangular to subrounded limestone. Frequent cobbles of subangular limestone. (CORNBRASH FORMATION)		
	- - -		83.70-	0.80	н	Stiff brownish grey slightly sandy slightly gravelly CLAY with occasional cobbles. Gravel is fine to coarse subangular to subrounded limestone. Cobbles are subangular to subrounded limestone. (CORNBRASH FORMATION)		
HV	- - 1.50 - - -	Cu = 120	- - - - 82.60-	1.90	С			<u>ा ति </u>
HV	- 2.00 - - - -	Cu = 88	82.40- 82.20-	(0.20)	H	Stiff light grey mottled orangish brown CLAY. (CORNBRASH FORMATION) Stiff light brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (CORNBRASH FORMATION) End of Trial Pit at 2.30m		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	- - - -		- - - -					
	- - - - -		- - - -					
	- - - -		- - - -					
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Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.30m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 3.00m

Width: 0.80m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Ground Level 84.21m AOD **Coordinates** E 456321.00 N 223083.00 **Total Depth** 3.10m

Ground Lev	vel 84.21m	AOD	Coo	rdinate	s E 456321.00 N 223083.00 Total Depth	3	3.10m
Sample / Test Type	epth (m) Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
-		-	(0.35)	E	Soft dark brown sandy slightly gravelly CLAY with frequent rootlets Gravel is medium to coarse subangular to subrounded limestone. (TOPSOIL)		
		83.86	(2.55)	М	Soft becoming firm brownish grey mottled orangish brown sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (CORNBRASH FORMATION)		77.71 (3)
HV - 2 - - - -	.40 Cu = 71	- - - - 81.31-	2.90		From 2.50m bgl: becoming slightly sandy clay.		
		_	(0.20)	VH	Stiff bluish grey CLAY. (CORNBRASH FORMATION)		-
HV - 3	.10 Cu = 12	0 81.11- 	3.10		End of Trial Pit at 3.10m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

15/08/2018

Remarks: Trial pit terminated at 3.10m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.75m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 15/08/2018 **Scale** 1:25

E 456298.00 N 223010.00

Total Depth

2.60m

Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GV
Туро	_		84.00	(0.25)	Е	Soft dark brown silty gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak thinly bedded grey LIMESTONE recovered as orangish brown		
	_		- - -	(0.70)	н	slightly sandy slightly clayey gravel with frequent cobbles. Gravel is fine to coarse angular to subrounded limestone. Cobbles are angular to subrounded limestone. (CORNBRASH FORMATION)		
	_		83.30	0.95				
ES	 - 1.10 - -		- - -			Soft becoming firm brownish grey mottled orangish brown sandy gravelly CLAY. Gravel is fine to medium subangular to subrounded limestone. (CORNBRASH FORMATION)		9 1 10 1 10 1 10 1 10 1
	_		- - -	(1.65)	M			
HV	- - - 2.30	Cu = 65						
D	2.45 _ - -		81.65- -	2.60		End of Trial Pit at 2.60m		•
	_							
	_ _ _		_					
	<u> </u>		-					
	_							

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Ground Level

84.25m AOD

Coordinates

Remarks: Trial pit terminated at 2.60m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.40m

Width: 0.85m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 15/08/2018 Scale 1:25

84 24m AOD Cround Lovel Total Donth 2 50m Coordinates E 456292 OO N 222040 OO

Ground Level	84.24m AOD	Coordinate	s E 456282.00 N 222949.00 Total Depth	2	.50m
Sample / Test Type Depth (m)	Result Level (mAoD)	Strata Depth (thickness) (m) Strata Depth of Dig	Description of Strata	Legend	GW
- - - - - - - -	83.94- 83.64-	(0.30) E - 0.30 (0.30) H	Soft dark brown slightly gravelly silty CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak thinly bedded grey LIMESTONE recovered as orangish brown silty sandy gravel with frequent cobbles. Gravel is fine to coarse angular to subrounded limestone. Cobbles are angular to subrounded limestone. (CORNBRASH FORMATION) Soft yellowish brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (CORNBRASH FORMATION)		
- - - -	- - - 82.84-	(0.80) M			
	-	1.40	Soft to firm greyish brown slightly gravelly sandy CLAY. Gravel is fine to medium limestone. Occasional subangular cobble of limestone. Rare pockets of brown clay. (CORNBRASH FORMATION)		
HV - 2.20	Cu = 96 -	(1.10) M	From 2.20m bgl: stiff.		10.1.1.10.1
	81.74	2.50	End of Trial Pit at 2.50m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.50m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.80m

Width: 0.75m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

83.45m AOD Ground Level Coordinates E 456267.00 N 222884.00 **Total Depth** 2 30m

Ground	Levei	83.45m AC	טט	Coo	rdinate	E 456267.00 N 222884.00 Total Depth	2	2.30m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- - 0.25		-	(0.35)	E	Soft dark brown sandy silty CLAY with frequent rootlets. (TOPSOIL)		
	- - - -		83.10	0.35		Soft orangish brown gravelly CLAY. Gravel is fine to medium angular to subrounded limestone. (CORNBRASH FORMATION) From 0.60m bgl: becoming slightly gravelly.		77.10 , 0 , 0 ,
	- - -		- - -	(1.05)	E			
	- - -		82.05- -	1.40		Firm light brown very sandy CLAY. (CORNBRASH FORMATION)		
D HV	- 1.60 - 1.70 -	Cu = 85	- - -	(0.90)	M	From 1.70m bgl: stiff.		
HV	— 2.00 - -	Cu = 120	-			From 2.00m bgl: slightly sandy clay.		4
			81.15-	2.30		End of Trial Pit at 2.30m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

15/08/2018

Remarks: Trial pit terminated at 2.30m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.75m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Ground Lovel 83 67m AOD Coordinates E 456261 00 N 222850 00 Total Donth 2 70m

Scale

1:25

Ground Level	83.67m AOD	Coordinate	s E 456261.00 N 222850.00 Total Depth	2	.70m
Sample / Test Type Depth (m)	Result Level (mAoD)	Strata Depth (thickness) (m) Strata Depth (thickness) Of Dig	Description of Strata	Legend	GW
- - - - -	83.42	(0.25) E 0.25 VH	Soft dark brown slightly gravelly silty CLAY with frequent rootlets. Gravel is fine to coarse subangular to rounded limestone. (TOPSOIL) Weak thinly bedded bluish grey mottled grey LIMESTONE recovered as orangish brown silty sandy gravel. Gravel is fine to coarse angular to subrounded limestone. (CORNBRASH FORMATION)		
- - - - - - - -	83.07- - - - - - - -	(1.10) M	Soft yellowish brown sandy slightly gravelly CLAY. Gravel is fine to medium angular to subrounded limestone. (CORNBRASH FORMATION)		
HV — 2.00	81.97- 		Soft to firm light brown mottled yellowish brown and light grey slightly gravelly sandy CLAY. Gravel is fine to medium angular to subangular limestone. (CORNBRASH FORMATION)		
- - - - - -	- - - - 80.97-	(1.00) M	End of Trial Pit at 2.70m		8
- - - - - - - - - - - - - - - - - - -					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

15/08/2018

Remarks: Trial pit terminated at 2.70m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.50m

Width: 0.70m

Logged: ST



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Date 15/08/2018 **Scale** 1:25

Ground Level 83.06m AOD **Coordinates** E 456301.00 N 222817.00 **Total Depth** 2.30m

Ground	Levei	83.06m A0	טט		rdinate	s E 456301.00 N 222817.00 Total Depth	2	.30m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
,,	- - -		82.76-	(0.30)	E	Soft dark brown sandy slightly gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded to rounded limestone. (TOPSOIL) Soft to firm light brown mottled orangish brown with rare black bioturbation sandy silty CLAY.		
ES	- - - 0.70 -		- - -	(0.70)	M	(CORNBRASH FORMATION)		
			82.0 6	1.00		Weak thinly bedded grey LIMESTONE recovered as orangish brown silty sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Rare pockets of yellowish brown sandy clay. (CORNBRASH FORMATION)		
	_	0 400	-	(1.30)	H/VH			
HV D	- 1.80 - 1.90 	Cu = 120	_ _ _					
	_ _ _		80.76- -	2.30		End of Trial Pit at 2.30m		
	- - -		- - -					
	_		_ _ _					
	_		- - -					
	_ _ _		- - -					
	_ _ _		- - -					
	_ _ _		-					
			_					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.30m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.40m

Width: 0.70m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Date 14/08/2018 **Scale** 1:25

Ground Level 83.06m AOD Coordinates E 456321.11 N 222881.37 Total Depth 2.20m

Ground Level	83.06m AOD	Coo	rdinates	E 456321.11 N 222881.37 Total Depth	2	2.20m
Sample / Test Type Depth (m)	Result Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
- - - - - - -	82.76-	(0.30)	E	Soft dark brown slightly gravelly slightly sandy CLAY with frequent rootlets. Gravel is fine to medium limestone. (TOPSOIL) Very weak thinly bedded grey mottled bluish grey LIMESTONE recovered as orangish brown slightly clayey sandy gravel with rare cobbles. Gravel is fine to coarse angular to subrounded limestone. Cobbles are angular to subangular limestone. (CORNBRASH FORMATION)		
- - - - - - -	81.96- - - - - -	1.10		Soft to firm yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium subrounded limestone. (CORNBRASH FORMATION)		
- - - - - -	- - - 80.86-	(1.10)	M	End of Trial Pit at 2.20m		18. 나 나는 나 나는 나 나는 나 나를
- - - - -	-					
- - - - - -	-					
- - - - -	-	-				
- - - - -	-					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.20m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.20m

Width: 0.50m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

83 46m AOD Total Donth 2 20m

Scale

1:25

Ground	Level	83.46m A0	OD	Coo	rdinate	E 456339.00 N 222929.00 Total Depth	2	.20m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	0.15 		83.16- - - -	(0.30)	E	Soft dark brown slightly gravelly sandy CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak very thinly to thinly bedded grey LIMESTONE recovered as orangish brown sandy very clayey gravel with frequent cobbles. Gravel is fine to coarse subangular to subrounded limestone. Cobbles are subangular limestone. (CORNBRASH FORMATION)		
	- - 		82.56- 	0.90		Stiff yellowish brown sandy slightly gravelly CLAY. (CORNBRASH FORMATION)		
D	- - - - - 1.80			(1.30)	Н			
HV	_ 1.80 - - -	Cu = 105	81.26-	2.20		End of Trial Pit at 2.20m		
	- - - -		- - -					
			- - - -					
			- - -					
	- - - -		- - -					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

14/08/2018

Remarks: Trial pit terminated at 2.20m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.70m

Width: 0.70m

Logged: ST



Project Howes Lane, Bicester Project No. AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

14/08/2018 1:25

Scale

83.49m AOD Ground Level Coordinates E 456339 00 N 222978 00 **Total Depth** 2.30m

Ground Level	83.49m AOD	Coordii	nates	E 456339.00 N 222978.00 Total Depth	2	2.30m
Sample / Test Type Depth (m)	Result Level (mAoD)	Strata Depth (thickness) (m) Strata Of	ase f Dig	Description of Strata	Legend	GW
-	83.24	(0.25)		Soft dark brown slightly gravelly sandy CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak thinly bedded grey mottled bluish LIMESTONE recovered as orangish brown slightly sandy clayey gravel. Gravel is fine to coarse		
- - - - - - - - - - - -	82.99 	0.50		subangular to subrounded limestone. (CORNBRASH FORMATION) Firm becoming stiff yellowish brown sandy CLAY. (CORNBRASH FORMATION)		
 - - - - -	81.19- - - - -	2.30		End of Trial Pit at 2.30m		
- - - - - -	- - - -					
- - - - -	-					
- - - - -						
- - -	-					

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

Remarks: Trial pit terminated at 2.30m bgl on hard limesone strata. Trial pit backfilled with arisings on completion.

Length: 2.70m

Width: 0.80m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Scale

1:25

Ground Level 83.64m AOD **Coordinates** E 456358.00 N 223036.00 **Total Depth** 2.70m

Ground Level	83.64m AOD	Coordinate	s E 456358.00 N 223036.00 Total Depth	2	.70m
Sample / Test Type Depti (m)	Result Level (mAoD)	Strata Depth (thickness) (m) Strata Depth of Dig	Description of Strata	Legend	GW
-	83.44	(0.20) E 0.20 H	Soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is fine to medium subangular to subrounded limestone. (TOPSOIL) Very weak to weak very thinly to thinly bedded bluish grey and grey LIMESTONE recovered as brown slightly sandy clayey gravel. Gravel is fine to coarse angular to subrounded of flat slabs of limestone <30mm in thickness. Occasional subangular cobbles of limestone. (CORNBRASH FORMATION)		
ES - 2.40	82.74	0.90 M	Firm becoming stiff light brown mottled grey and orangish brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. Too friable for HSVs. (CORNBRASH FORMATION)		
	80.94	2.70	End of Trial Pit at 2.70m		

Method:

Date

14/08/2018

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.70m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.80m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Ground Lovel 83 41m AOD Coordinates F 456382 00 N 223073 00 Total Donth 4 40m

Scale

1:25

Ground Level	83.41m AOD	Coordinate	s E 456382.00 N 223073.00 Total Depth	4	1.40m
Sample / Test Type Depth (m)	Result Level (mAoD)	Strata Depth (thickness) (m) Strata Depth of Dig	Description of Strata	Legend	GW
- - - - - -	83.11 - - - -	(0.30)	Soft dark brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded limestone. (TOPSOIL) Very weak thinly bedded bluish grey LIMESTONE recovered as orangish brown clayey sandy gravel. Gravel is fine to coarse subangular to subrounded flat slabs of limestone. (CORNBRASH FORMATION)		NXXXXXXXX
- - - - - - - - - - - - - - - - - - -	82.61-	(2.80)	Firm to stiff light brown mottled grey and orangish brown slightly sandy gravelly CLAY. Gravel is fine to medium subangular to subrounded of limestone. (CORNBRASH FORMATION)		그런 나는 하는 나라는 나라는 사람들이 나라는 사람들이 가려면 가지 않는 것이 되었다. 그런 나는 사람들이 가지 않는 것이 되었다.
- - - - - - - - - - - - - - - - - - -	79.81-	(0.80)	Stiff friable bluish grey CLAY. (CORNBRASH FORMATION) End of Trial Pit at 4.40m		

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Date

14/08/2018

Remarks: Trial pit backfilled with arisings on completion.

Length: 2.60m

Width: 0.80m

Logged: ST



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Client Albion Land Two Ltd Sheet 1 of 1

Date 20/08/2018 **Scale** 1:25

Ground Level 84.49m AOD **Coordinates** E 456381.48 N 223158.54 **Total Depth** 2.10m

Ground	Level	84.49m AOD)	Coor	dinate	E 456381.48 N 223158.54 Total Depth	2	.10m
Sample / Test Type	Depth (m)		_evel nAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- 0.10 - -	8	- 4.29- - -	(0.20) 0.20 (0.40)	E ,	Crops over soft dark brown slightly gravelly sandy CLAY with frequent rootlets. Gravel is fine to coarse angular to subrounded limestone. (TOPSOIL) Very weak very thinly to thinly bedded grey LIMESTONE recovered as orangish brown clayey sandy gravel. Gravel is fine to coarse angular to subrounded limestone. Occasional cobble of subangular limestone.		
	_ _ _		3.89-	0.60 (0.30)	М	(CORNBRASH FORMATION) Soft to firm light brown sandy slightly gravelly CLAY. Gravel is fine to coarse subrounded of limestone. (CORNBRASH FORMATION)		
	_	8.	3.59-	0.90		Firm brownish grey mottled orangish brown slightly sandy CLAY. (CORNBRASH FORMATION)		
D	- 1.20 - -		-	(1.20)	М	At 1.10m to 1.25m bgl: band of orangish brown sandy clay in western half of pit.		
			- - -	(1.20)	IVI			
		8.	2.39-	2.10		End of Trial Pit at 2.10m		
	_ _ _		- - -					
	_ _ _		-					
	- - -		- - - -					
	 _ _ _		- - -					
	_		- - -					
	_ _ _							
	_ _ _		-					
	_							

Method: Backhoe excavator

Groundwater: Groundwater not encountered

Stability: Stable.

Remarks: Trial pit terminated at 2.1m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.40m

0.80m

Logged: ST Checked: AP

Width:



ProjectHowes Lane, BicesterProject No.AG2873-18

Client Albion Land Two Ltd Sheet 1 of 1

Ground Level 84.63m AOD Coordinates E 456396.00 N 223100.00 Total Donth 0.80m

Scale

1:25

Ground	Level	84.63m AC	DD	Coo	rdinate	s E 456396.00 N 223190.00 Total Depth	0	.80m
Sample / Test Type	Depth (m)	Result	Level (mAoD)	Strata Depth (thickness) (m)	Ease of Dig	Description of Strata	Legend	GW
ES	- - 0.25		84.33-	(0.30)	E	Crops over soft dark brown silty gravelly CLAY with frequent rootlets. Gravel is fine to coarse subangular to subrounded of limestone. (TOPSOIL) Very weak thinly bedded light grey LIMESTONE recovered as orangish brown slightly days a lightly analysis and crown lightly days a lightly analysis fine to coarse angular to		
В	_ - - 0.75		-	(0.50)	VH	slightly clayey slightly sandy gravel. Gravel is fine to coarse angular to subrounded of limestone. Frequent angular to subangular cobbles of limestone. (CORNBRASH FORMATION)		-
	_		83.83-	0.80		End of Trial Pit at 0.80m		
	_		_					
	_ _		-					
	_		_ _					
	_ _		-					
	_		-					
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								oxed

Method: Backhoe excavator

Groundwater: Groundwater not encountered.

Stability: Stable.

Date

22/08/2018

Remarks: Trial pit terminated at 0.80m bgl on hard limestone strata. Trial pit backfilled with arisings on completion.

Length: 2.10m

Width: 0.70m

Logged: ST

