

Land East of Chickenhall Lane, Eastleigh: Mineral Resource Assessment

December 2024

1.0 Introduction

- 1.1 IRUK Waste Planning and Consultancy Ltd (IWPC) has been instructed by Highwood Ventures 7 Ltd to prepare a Mineral Resource Assessment (MRA) in relation to land east of Chickenhall Lane, Eastleigh.
- 1.2 The assessment has been prepared in support of a planning application to be submitted to Eastleigh Borough Council (EBC) for a proposed *'70-bed care home (Use Class C2), associated parking, landscaping, access, drainage and other associated works following demolition of existing structures'*, on land east of Chickenhall Lane, Eastleigh.
- 1.3 The application site is located within the Minerals & Waste Consultation Area (MWCA) for 'soft sand' and 'superficial sand and gravel' as identified on the Hampshire County Council (HCC) online policies map. As such, **Policy 15: Safeguarding – mineral resources** of the Hampshire Minerals & Waste Plan (HMWP) and **Policy 15: Safeguarding – mineral resources** of the emerging HMWP Partial Update would apply (eHMWP).
- 1.4 Policy 15 of HMWP states that *"Hampshire's sand and gravel...resources are safeguarded against needless sterilisation by non-minerals development unless 'prior extraction' takes place...Development without the prior extraction of mineral resources in the Mineral Safeguarding Area may be permitted if: a. it can be demonstrated that the sterilisation of mineral resources will not occur; or b. it would be inappropriate to extract mineral resources at that location, with regards to other policies in the Plan;...or d) the merits of the development outweigh the safeguarding of the mineral."*
- 1.5 Policy 15 of the eHMWP does not differ in its requirements from the above.
- 1.6 The HMWP Minerals & Waste Safeguarding in Hampshire Supplementary Planning Document (SPD) provides helpful guidance on the approach to addressing mineral safeguarding within a planning application. The SPD sets out the information that developers should look to provide:
 - *the mineral potential e.g. quality and quantity;*
 - *any likely opportunities for the prior extraction of mineral resources and how these can be maximised;*
 - *any constraints to the prior extraction of mineral resources;*
 - *any opportunities for incidental extraction as part of the development of the site (e.g. foundations and footings);*
 - *mineral resources outside of the MWCA / MSA in proximity to the site; and*
 - *evidence of discussions with local operators to confirm the viability of prior extraction, where relevant.*

- 1.7 The SPD further adds that *“In order to assess the quality and quantity of the mineral resource that is potentially impacted by a development proposal, it is likely that a developer will need to undertake mineral exploratory work. This could be undertaken as part of the initial ground investigation works and should include boreholes and/or trial pits.”*

Mineral Resource Assessment

- 1.8 The MRA comprises three principal elements. It includes establishing the environmental and physical setting of the site to identify any related constraints that might act as a barrier to mineral extraction. It also includes an analysis of results from an intrusive site investigation to understand the extent and quality of any mineral resource that underlies the application site. These two aspects are then considered jointly to advise on the most suitable and sustainable management of any identified resource whilst ensuring that the principal proposed development can proceed in a viable and sustainable manner and accord with Policy 15 of the HMWP.

2.0 Site Setting

- 2.1 The application site is located on land to the east of Chickenhall Lane, where it meets Bishopstoke Road. It lies adjacent to the western edge of the Barton River, which is a tributary of the River Itchen. The approximate National Grid Reference is SU461191.
- 2.2 The site covers a total area of 0.6Ha and is roughly triangular in shape, with the Barton River and a line of trees and vegetation running along the northeastern boundary, and hedgerows defining the southwest and southeastern boundaries.
- 2.3 To the north, across Bishopstoke Road lies the River Itchen and Bishopstoke Recreation Ground, to the west is the Barton Park Industrial Estate and to the south and east are fields and the River Itchen.
- 2.4 The site has an existing access onto Chickenhall Lane which would be upgraded as part of the proposed development.
- 2.5 The site lies adjacent to the Barton River which is a tributary of the River Itchen. The River Itchen is both a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC). The site also lies partially within Flood Zones 2 and 3.
- 2.6 British Geological Survey (BGS) mapping indicates that the majority of site overlies superficial Alluvial Deposits (clay, silt, sand and gravel) over the bedrock geology of the Whitecliff Sand Member. The most western edge (along Chickenhall Lane) of the site is shown to overlie superficial River Terrace Deposits (sand and gravel) over the bedrock geology of the Wittering Formation (sand, silt and clay).
- 2.7 A review of the available BGS boreholes records in the vicinity of the site has been undertaken. There are no historic boreholes that coincide with the site. The nearest

available borehole records are to the north and south of the site as shown on **Figure 1** below. The logs from these off-site boreholes are summarised in **Table 1**.

Figure 1: British Geological Survey Borehole Record Locations

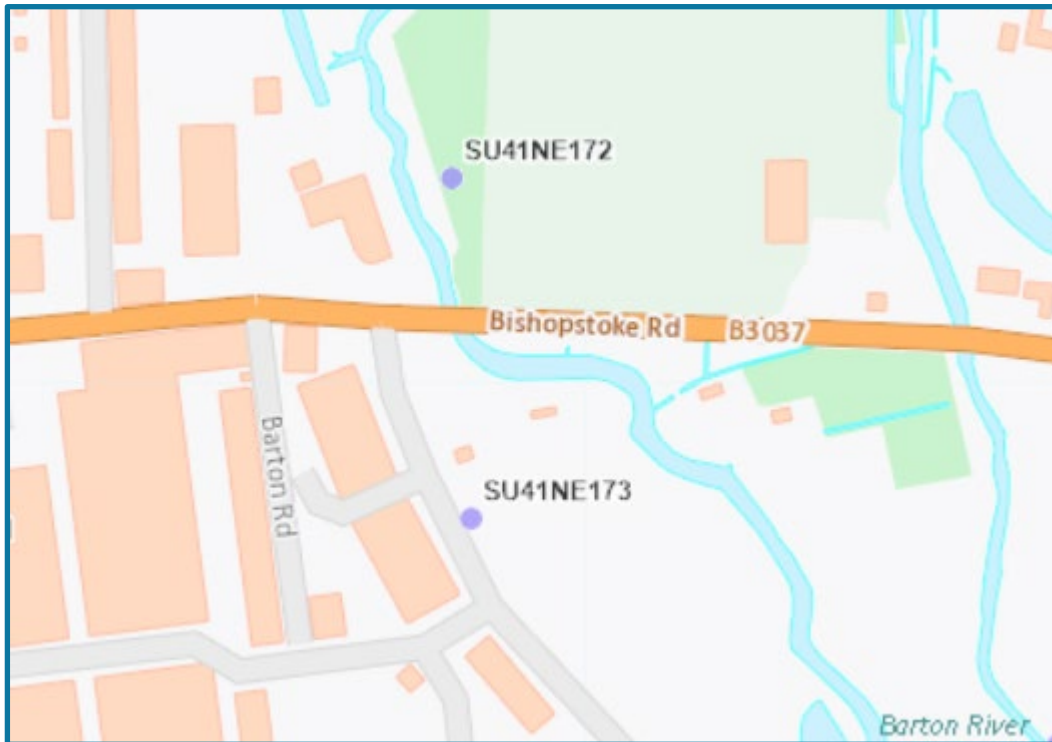


Table 1 – British Geological Survey Borehole Record Summary

Borehole Record	Direction from Site	Topsoil Depth	Strata Encountered & Depth	Total Depth of Borehole
SU41NE172	North	Not recorded	Soft black PEAT (0.00-10.3ft/~3.1m) Varying GRAVEL (10.3ft/~3.1m-15.6ft/~4.7m)	15.6ft/~4.7m
SU41NE173	South	Not recorded	Soil, gravel and brick FILL (3ft/~0.9m) Soft black PEAT (3ft/~0.9m - 9.6ft/~2.9m) Loose light greyey brown SAND & GRAVEL	15.7ft/~4.8m

			(9.6ft/2.92m - 15.7ft/~4.8m)	
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- 2.8 These borehole records are consistent with the anticipated geology based upon the BGS mapping.

Summary of Site Setting Acting as a Constraint

- 2.9 The physical and environmental setting of the site, described in this section, has the potential to constrain the physical extraction of any underlying mineral resource.
- 2.10 Although quarrying operations are subject to stringent controls in respect of matters such as noise generation and dust management, it would be expected that appropriate buffer zones would be maintained between mineral working and existing built development and ecologically sensitive receptors. An example of this control is set out in the HMWP which states (para. 5.15) that *“It is standard practice in Hampshire for operational mineral extraction and inert waste recycling facilities to have a minimum buffer zone of 100 metres, where appropriate, from the nearest sensitive human receptors, such as homes and schools...reviewed on a case-by-case basis.”*
- 2.11 As stated above, the site lies adjacent to a SSSI/SAC, is partially within Flood Zones 2 and 3, and appropriate stand-offs/ buffer zones would need to be applied to prevent any impacts from mineral working.
- 2.12 There are also established mature trees and hedgerows along the site boundaries and appropriate buffers based upon root protection zone would need to be applied.
- 2.13 In addition, there is a rising main and a main sewer (both Southern Water assets) running north – south inside the western site boundary. An easement to these assets is required.
- 2.14 A Minerals Constraints Plan (CHK-MCA-01) has been provided which has applied buffers of 15m from retained trees and hedges, 10m from the Flood Zones (and SSSI/SAC), and 10m from the Southern Water asset easement. The footprint of the site that would be ‘unconstrained’ is just 635m² i.e. less than 0.07 of a hectare. The HMWP Minerals & Waste Safeguarding in Hampshire Supplementary Planning Document (SPD) sets out that the focus of the mineral safeguarding policy is to protect viable mineral resources. To that extent the SPD states (para. 4.13) that proposals of less than 3 hectares in size would have no implication on mineral safeguarding, on the basis that smaller deposits are unlikely to be viable.
- 2.15 The proposed development site would therefore be considered unviable for mineral extraction across both its full application boundary (0.6Ha) and its constrained footprint (<0.07Ha).
- 2.16 However, for the purposes of best practice and seeking to ensure any readily available mineral is recovered for use as part of development proposals the remainder of this

assessment considers the potential for the application site to yield mineral via incidental extraction through consideration of the results of a site investigation.

3.0 Mineral Investigation

- 3.1 To support this mineral resource assessment a targeted site investigation has been undertaken at the application site. These works were undertaken by Ground Condition Consultants in March 2024 and September 2024, which comprised the excavation of 13no. boreholes distributed across the site. The location of the boreholes are shown on Plan CHK-MCA-01 and the borehole logs are provided in [Appendix A](#).
- 3.2 The boreholes reached a maximum depth of 5m – being the maximum depth achievable based upon the encountered ground conditions with the rig available.
- 3.3 The ground conditions encountered during the investigation are broadly consistent with the published BGS mapping.
- 3.4 As is evidenced by the full borehole logs and the summary in [Table 2](#), the ground conditions comprised MADE GROUND over ALLUVIUM (silt, sand gravel and peat) to depths of between 3.7m bgl and 4.7m bgl over River Terrace Deposits (sandy GRAVEL) encountered at thickness of 0.4m to 1.1m or not proven where it was the basal strata, in turn over WHITECLIFF SAND MEMBER (possibly dense slightly silty fine SAND) to depth in the two locations where encountered.
- 3.5 Groundwater was encountered during the investigation at between 2.1m bgl and 3.8m bgl and rapidly rose to approximately 1.0m during drilling, indicating confined water within the permeable strata of the ALLUVIUM.

Table 2 – Encountered Ground Conditions Summary

Top (m bgl)	Base (m bgl)	Description
0.00	0.20-0.90	MADE GROUND: Dark brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint and occasional red brick fragments.
0.20-0.90	3.70-4.70	ALLUVIUM: Made up of a mix of GRAVEL, SILT and PEAT.
3.20-4.70	4.20-5.0	RIVER TERRACE DEPOSITS: Dark brown and grey sandy fine to coarse angular to subangular flint GRAVEL
4.20-4.80	>5.0	WHITECLIFF SAND MEMBER: Light grey slightly silty fine SAND

- 3.6 The RIVER TERRACE DEPOSITS were encountered beneath the ALLUVIUM in all of the investigation locations and attained proven thicknesses of up to 1.1m and formed the basal stratum in 4no. of the boreholes. This stratum comprised dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL.

- 3.7 The WHITECLIFF SAND MEMBER was encountered beneath the RIVER TERRACE DEPOSITS in 5no. of the boreholes (in the southeast of the site) and comprised light grey slightly silty fine SAND. The Poole Formation achieved proven thicknesses of greater than 0.8m and formed the basal stratum in all of the boreholes where it was encountered.
- 3.8 The site investigation work suggests that any GRAVEL or SAND deposits are likely to be constrained by depth (GRAVEL min. 3.2m bgl / SAND min. 4.2m bgl) and/or location (SAND only encountered in southeast of site).

4.0 Analysis

- 4.1 The site investigation process has effectively verified the geological and mineral safeguarding mapping in confirming that the application site is underlain by a deposit of 'soft sand' from the WHITECLIFF SAND MEMBER and 'superficial sand and gravel' from the RIVER TERRACE DEPOSIT.
- 4.2 The size of the underlying reserve is significantly limited by the small size of the development site (0.6Ha). In addition, the site is adjacent to an ecologically designated river and its flood zone and there are existing trees to be retained on site boundaries as part of the proposed development, as well as Southern Water infrastructure that needs to be protected. As such, an appropriate buffer zone or stand-off would need to be considered if any mineral extraction were to be undertaken. Applying appropriate buffer zones means that the area of 'unconstrained' land for mineral extraction is reduced to less than 0.07Ha, as shown on Plan CHK-MCA-01.
- 4.3 It should also be noted that given the minimum below ground level at which both the encountered SAND and GRAVEL deposits begin (~4.2m and ~3.2m respectively), a large amount of ALLUVIUM overburden would need to be excavated to reach this limited deposit. It is also not anticipated that any SAND or GRAVEL would be extracted from the site during the course of the normal construction works due to the depth at which each is encountered on the site.
- 4.4 The SPD guidance produced by HCC acknowledges that sites or deposits of less than 3Ha would not have an implication on mineral safeguarding as a consequence of being unviable to work commercially.
- 4.5 On the basis of the location of the site and its identified constraints along with the extent of underlying mineral IWPC is of the view that neither prior extraction nor incidental extraction of mineral at this site is viable. In the absence of a viable resource mineral sterilisation would not occur and the proposed development would not prejudice **Policy 15: Safeguarding – mineral resources** of the Hampshire Minerals and Waste Plan by way of part (a) [sterilisation of the mineral will not occur].

Conclusion

- 4.6 This Mineral Resource Assessment has been prepared by IRUK Waste Planning and Consultancy to support a planning application by Highwood Ventures 7 Ltd for '70-bed care home (Use Class C2), associated parking, landscaping, access, drainage and other

associated works following demolition of existing structures', on Land East of Chickenhall Lane, Eastleigh.

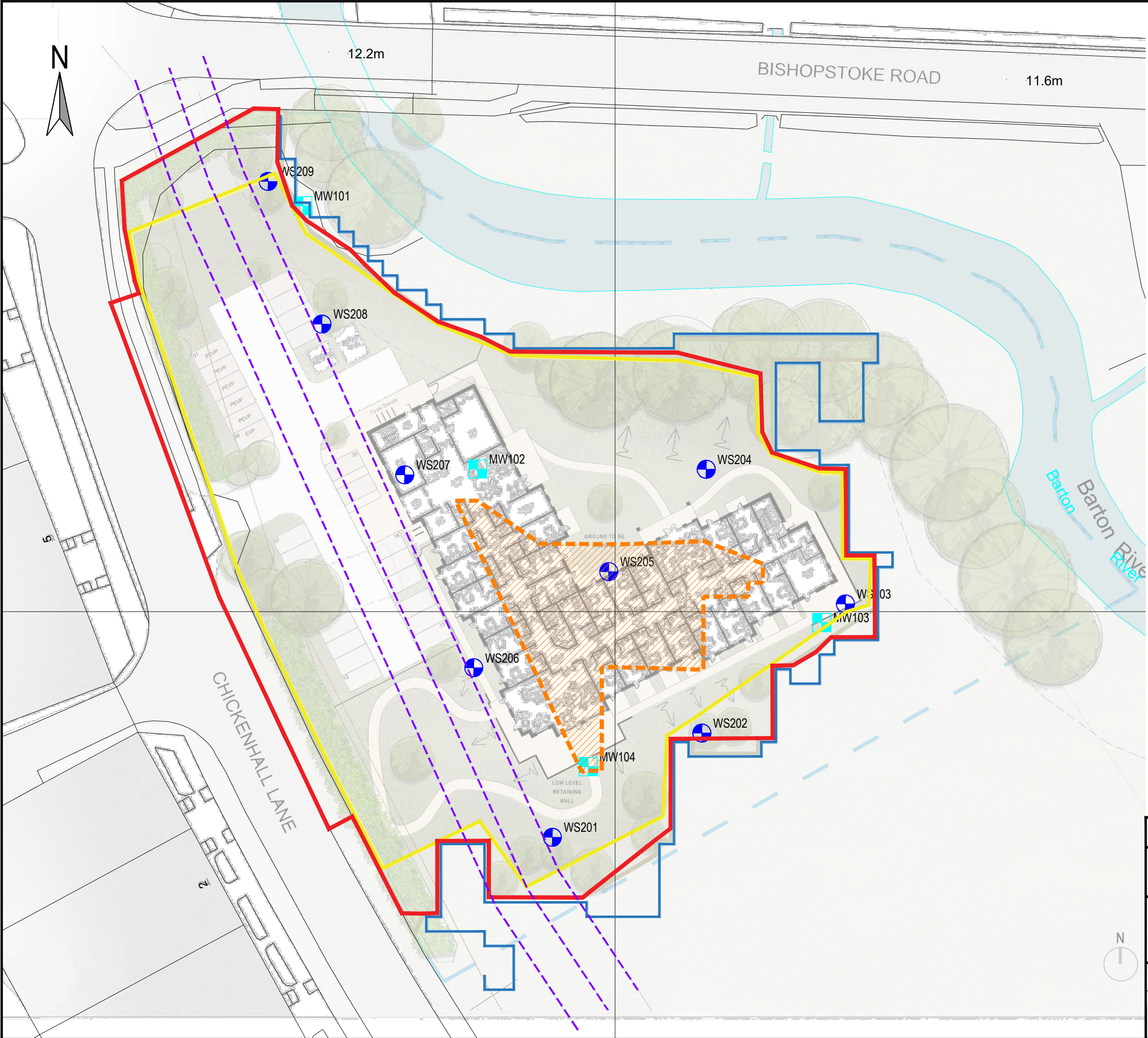
- 4.7 This assessment has followed guidance set out in the Minerals & Waste Safeguarding in Hampshire Supplementary Planning Document (2016) (SPD) through undertaking a site investigation to obtain information on the mineral potential of the site, identified any constraints to the prior extraction of mineral; and established the lack of opportunity within the proposed development to undertake mineral extraction. The proposed development would therefore accord with **Policy 15: Safeguarding – mineral resources** of the Hampshire Minerals & Waste Plan (2013).

DRAWINGS

CHK-MCA-01 Constraints Plan & SI Locations

APPENDICES

Appendix A Borehole Logs

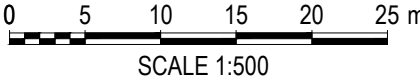


KEY:

-  POTENTIAL EXTRACTION AREA ONCE CONSTRAINTS ARE APPLIED
-  SITE INVESTIGATION LOCATION
-  APPLICATION BOUNDARY
-  CARE HOME CURTILAGE
-  FLOOD ZONE
-  EASEMENT

NOTE:

- BASED ON INFORMATION PROVIDED BY OTHERS



HIGHWOOD HOMES							
CHICKENHALL MINERAL ASSESSMENT							
CONSTRAINTS PLAN SHOWING SI LOCATIONS AND DESIGNER COMMENTARY							
Drawing Number CHK-MCA-01	Drawn DJE	Date 04-10-24	Approved Date	Issue W3	Sheet 1 OF 1	Scale @ A3 1:500	
 INERT SURVEYING & DESIGN LIMITED				HIGHBRIDGE ESTATES HIGHBRIDGE ROAD HIGHBRIDGE SO50 6HS			
+44 (0)1962 717627 +44 (0)7801 353650 david.evans@inertrecycling.co.uk							

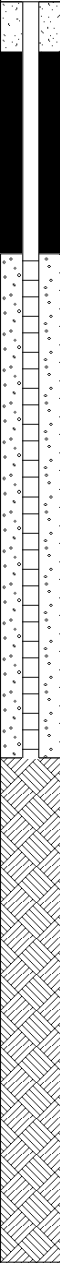
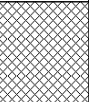
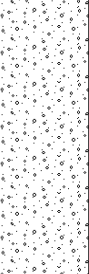






Percussion Drilling Log

Project Name: Chickenhall Lane		Client: Highwood		Date: 17/09/2024	
Location: Eastleigh		Contractor: Oakland SI			
Project No. : J24-018		Crew Name: D		Drilling Equipment: Premier 110	
Borehole Number WS203	Hole Type WLS	Level	Logged By RP	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.20	ES		0.40			Grass over soft brown grey silty sandy gravelly SILT with rootlets and occasional red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND	
								Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. ALLUVIUM	1
									2
									3
									4
		3.30 - 3.50	ES		3.20			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS	
					4.30			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER	
					5.00			End of Borehole at 5.00m	5
									6

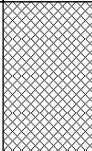
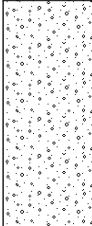
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks Groundwater encountered at 2.1m rising to 1.0m	
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Percussion Drilling Log

Project Name: Chickenhall Lane		Client: Highwood		Date: 17/09/2024	
Location: Eastleigh		Contractor: Oakland SI			
Project No. : J24-018		Crew Name: D		Drilling Equipment: Premier 110	
Borehole Number WS204	Hole Type WLS	Level	Logged By RP	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20 - 0.40	ES					Grass over soft brown grey silty sandy gravelly SILT with rootlets and occasional red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND	
					0.60			Soft brown silty CLAY with occasional fine to medium flint gravel ALLUVIUM	
					0.90			Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. ALLUVIUM	1
		1.30 - 1.50	ES						2
					3.80			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS	4
					4.70			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER	
					5.00			End of Borehole at 5.00m	5
									6

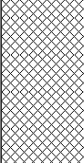
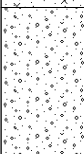
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 3.1m rising to 1.0m





Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20			Grass over soft brown silty sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint TOPSOIL	
		0.50 - 0.60	ES					Soft brown grey silty sandy gravelly CLAY with frequent red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND	
		1.00 - 1.10	ES		0.90			Soft brown silty CLAY with occasional small to medium flint gravel ALLUVIUM	1
					1.30			Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. ALLUVIUM	2
		3.00 - 4.00	B						3
					4.20			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS	4
					4.80				
					5.00			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER	5
								End of Borehole at 5.00m	6

Remarks	
Groundwater encountered at 3.8m rising to 1.0m	



Percussion Drilling Log

Project Name: Chickenhall Lane		Client: Highwood		Date: 18/09/2024	
Location: Eastleigh		Contractor: Oakland SI			
Project No. : J24-018		Crew Name: D		Drilling Equipment: Premier 110	
Borehole Number WS206	Hole Type WLS	Level	Logged By RP	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30 - 0.40	ES		0.10			Grass over soft brown silty sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint TOPSOIL Soft brown grey silty sandy gravelly CLAY with frequent red brick and occasional tarmacadam fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND	
					0.80			Soft brown silty CLAY with occasional fine to medium flint gravel and wood fragments ALLUVIUM	1
					1.40			Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments ALLUVIUM	2
		2.30 - 2.50	ES		2.30			Soft grey very silty sandy CLAY with occasional small to medium flint gravel and wood fragments ALLUVIUM	3
					3.80			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS	4
					4.60			End of Borehole at 4.60m	5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
Groundwater encountered at 2.3m rising to 1.0m







Percussion Drilling Log

Project Name: Chickenhall Lane		Client: Highwood		Date: 18/09/2024	
Location: Eastleigh		Contractor: Oakland SI			
Project No. : J24-018		Crew Name: D		Drilling Equipment: Premier 110	
Borehole Number WS208	Hole Type WLS	Level	Logged By RP	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20 - 0.30	ES		0.20			Soft dark brown sandy gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. TOPSOIL	
								Soft dark brown sandy gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. ALLUVIUM	
					1.10				1
		1.20 - 1.30	ES		1.30			Soft brown grey silty CLAY with frequent fine to medium flint gravel ALLUVIUM	
								Soft dark brown grey slightly spongy fibrous silty sandy PEAT ALLUVIUM	
					2.10				2
								Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. ALLUVIUM	
					2.90				
								Grey very silty fine SAND with occasional small to medium flint gravel ALLUVIUM	3
									4
					4.60 4.70			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS End of Borehole at 4.70m	5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
Groundwater encountered at 2.9m rising to 1.5m



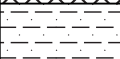
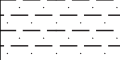
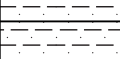
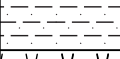
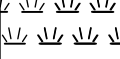
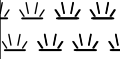
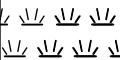
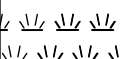
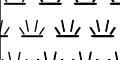
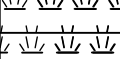
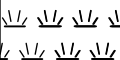
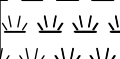
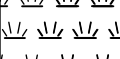
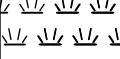
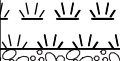
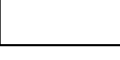


BOREHOLE LOG MW101

PROJECT NUMBER J24-018	DRILLING COMPANY Oakland SI
PROJECT NAME Chickenhall Lane	DRILLING METHOD Windowless Sampling
CLIENT Highwood Homes Ltd	DRILLING RIG Dando Terrier
ADDRESS Eastleigh	LOGGED BY DP
DATE 27/03/2024	

CASING

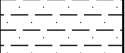
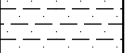
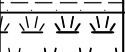
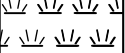
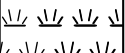
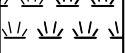
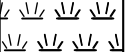
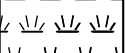
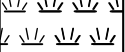
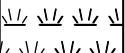
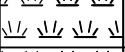
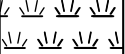
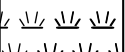
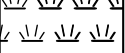
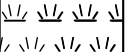
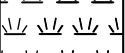
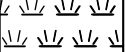
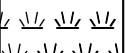
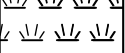
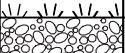
COMMENTS Groundwater strike at 3.0m rising to 2.0m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.5m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Dark brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint and occasional red brick fragments. (MADE GROUND)	
		0.4		Soft to firm dark brown to orange brown sandy gravelly SILT. Gravel is fine to coarse angular to subrounded flint. (ALLUVIUM)	
		0.6			
		0.8			
		1			
		1.2			
WS 100%		1.4		Soft dark grey brown sandy slightly gravelly SILT. Gravel is fine to coarse angular to well rounded flint. Locally organic. (ALLUVIUM)	
		1.6			
		1.8			
WS 100%		2			
		2.2		Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent relic reeds and roots. Organic odour. (ALLUVIUM)	
		2.4			
		2.6			
		2.8			
		3			
WS 80%		3.2			
		3.4		Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. Strong organic and sulphurous odour. (ALLUVIUM)	
		3.6			
		3.8			
		4			
WS 30%		4.2			
		4.4			
		4.6			
		4.8		(Possibly dense) grey to orange brown sandy fine to medium angular to subrounded flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		5		Termination Depth at: 5.0m	
		5.2			
		5.4			

BOREHOLE LOG MW102

PROJECT NUMBER J24-018 PROJECT NAME Chickenhall Lane CLIENT Highwood Homes Ltd ADDRESS Eastleigh DATE 27/03/2024	DRILLING COMPANY Oakland SI DRILLING METHOD Windowless Sampling DRILLING RIG Dando Terrier LOGGED BY DP
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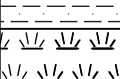
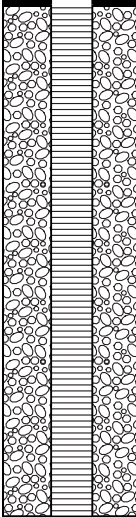
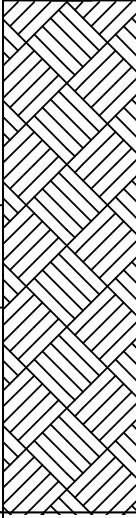
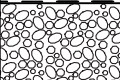
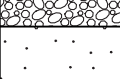
CASING
COMMENTS Groundwater strike at 2.7m rising to 1.4m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Soft dark brown sandy slightly gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. (MADE GROUND)	
		0.4		Orange brown silty sandy fine to coarse angular to well rounded flint GRAVEL. Occasional red brick fragments. (MDE GROUND)	
		0.6		Orange brown silty sandy fine to coarse angular to well rounded flint GRAVEL. (ALLUVIUM)	
		0.8		Soft brown sandy to very sandy slightly gravelly SILT. Gravel is fine to medium angular to subangular flint. (ALLUVIUM)	
		1.0		Interbeds of soft light grey sandy slightly gravelly SILT and soft dark brown and brown slightly spongy fibrous silty sandy PEAT with frequent relic roots and reeds. (ALLUVIUM)	
WS 100%		1.2			
		1.4			
		1.6			
		1.8			
		2.0			
WS 55%		2.2			
		2.4			
		2.6			
		2.8			
		3.0			
WS 15%		3.2		Very soft dark brown silty sandy PEAT recovered as loose soil in water. (ALLUVIUM)	
		3.4			
		3.6			
		3.8			
		4.0			
WS 15%		4.2			
		4.4			
		4.6			
		4.8		(Possibly dense) grey slightly silty sandy fine to coarse angular flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		5.0		Termination Depth at: 5.0m	
		5.2			
		5.4			

BOREHOLE LOG MW103

PROJECT NUMBER J24-018	DRILLING COMPANY Oakland SI
PROJECT NAME Chickenhall Lane	DRILLING METHOD Windowless Sampling
CLIENT Highwood Homes Ltd	DRILLING RIG Dando Terrier
ADDRESS Eastleigh	LOGGED BY DP
DATE 27/03/2024	

CASING
COMMENTS Groundwater strike at 2.0m rising to 0.7m over 10 minutes. Borehole collapse/blowing from 5.0m to 3.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Soft brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint and occasional red brick fragments. (MADE GROUND)	
		0.4		Soft grey brown sandy gravelly SILT. Gravel is fine to medium angular to subangular flint and chalk. (ALLUVIUM)	
		0.6			
		0.8		Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent relic roots and reeds. Organic odour. (ALLUVIUM)	
		1.0			
		1.2			
WS 100%		1.4			
		1.6			
		1.8			
		2.0			
WS 70%		2.2			
		2.4			
		2.6			
		2.8			
		3.0			
WS 10%		3.2			
		3.4			
		3.6			
		3.8			
		4.0		Dark brown and grey sandy fine to coarse angular to subangular flint GRAVEL (RIVER TERRACE DEPOSITS)	
		4.2			
WS 30%		4.4		(Possibly dense to very dense) light grey slightly silty fine SAND (WHITECLIFF SAND MEMBER)	
		4.6			
		4.8			
		5.0		Termination Depth at: 5.0m	
		5.2			
		5.4			

BOREHOLE LOG MW104

PROJECT NUMBER J24-018
PROJECT NAME Chickenhall Lane
CLIENT Highwood Homes Ltd
ADDRESS Eastleigh
DATE 27/03/2024

DRILLING COMPANY Oakland SI
DRILLING METHOD Windowless Sampling
DRILLING RIG Dando Terrier
LOGGED BY DP

CASING

COMMENTS Groundwater strike at 2.0m rising to 0.6m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation	
Hand excavated		0.2		Soft brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint. (MADE GROUND)		
		0.4		Light grey brown silty sandy fine to coarse flint GRAVEL with occasional red brick fragments. (MADE GROUND)		
		0.6		Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent relic roots and reeds. Organic odour. (ALLUVIUM)		
		0.8				
		1.0				
		1.2				
WS 100%		1.4		Soft dark brown slightly spongy fibrous silty sandy PEAT with frequent red brown relic spongy wood fragments. Strong organic and sulphurous odour. (ALLUVIUM)		
		1.6				
		1.8				
		2.0				
WS 70%		2.2		Interbeds of light brown very soft silty sandy PEAT and silty slightly gravelly fine to coarse SAND. Gravel is fine chalk and rare flint. (ALLUVIUM)		
		2.4				
		2.6				
		2.8				
		3.0				
WS 20%		3.2				
		3.4				
		3.6				
		3.8		Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. (RIVER TERRACE DEPOSITS)		
		4.0				
WS 90%		4.2				
		4.4				
		4.6				
		4.8				
			5.0		Light grey slightly silty fine SAND. (WHITECLIFF SAND MEMBER)	
		5.2		Termination Depth at: 5.0m		
		5.4				