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Ford • Arundel • West Sussex • BN18 0UZ

[redacted]

White Mill House, Fontwell
Factual Letter Report

Date: 26/03/2025
Our Ref: 24.1171
Client: NJS Partnerships
FAO: Joe Shopland

Re: White Mill House, Shallow Borehole - Winter Groundwater Monitoring

Introduction

In October 2024 Constructive Evaluation (CE) Limited was commissioned by NJS Partnerships (the Client) to carry out a Site Investigation at White Mill House, Days lane, Fontwell, BN180TA, hereafter referred to as the "site". The intent of this report is to present a factual summary of the site investigation and winter groundwater monitoring results.

Site Proposal

Details of the proposed development were provided by the client, outlined within a proposed site plan referenced 1546/DP03 rev 02. The plan proposes a new residential property with a hardstanding driveway and soft landscaping.

The Scope of Works

The scope of works was specified by the Client to include one windowless sampling borehole to a target depth of 6.0mbgl and a standpipe installation within the borehole for purposes of groundwater monitoring over a six-month period between October 2024 and March 2025.

Site Description

The subject site has an approximate grid reference of SU 94902 07259 and is rectangular in shape covering an approximate area of 1400m2. The site is approximately ~25m N-S and ~30m E-W. The site is surrounded by residential properties, agricultural arable fields, woodland and a primary school to the south. Ordnance Survey Maps 1:25000 of the area indicate surface elevations of between 36 and 38 metres above mean sea level (mamsl).

The site was accessed via a gated entrance from Days Lane to the east of the site. Existing structures on the site include a storage shed at the eastern boundary, and a small greenhouse within the centre of the site. Topography across the site is relatively level with heavy vegetation, hedging, mature trees and fencing forming the borders of the site. The majority of the site is covered in grass, with some brick paving paths. Surface water was not present across the site and surrounding area.

An outline of the site boundaries is provided below:

- Northern Boundary – Mature treeline into a grass garden with gravel path.
- Eastern Boundary – Wooden fencing with hedging and heavy vegetation. Mature trees along the fencing adjacent to Days Lane.
- Southern Boundary – Wooden fencing and mature coniferous trees. Educational centre to the south of the site.
- Western Boundary – Flint and red brick wall with small gate passage to existing property off site.

The Site Location Plan is provided as Figure 1.

Site Investigation

The site investigation comprised the following:

- One windowless sampling borehole to a maximum depth of 5.80mbgl and standpipe installation with a flush-cover finish. The borehole was terminated at 5.80mbgl due to refusal.

The Site Investigation Plan is provided within Figure 2. Table 1 provides a summary of BH1.

Table 1: Summary of Encountered Soils

Material	Description	Min-Max Depth (mbgl)
Topsoil	Grass over brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to medium sub-angular to sub-rounded red brick and flint. Abundant rootlets.	0.0 – 0.25
Made Ground	Brown slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular of flint and red brick.	0.25 – 0.40
Head Deposits	Brown slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular flint.	0.40 – 1.00
Head Deposits	Firm brown gravelly CLAY. Gravel is fine to coarse angular to sub-rounded flint.	1.00 – 2.20
Head Deposits	Very stiff brown mottled black CLAY to firm brown sandy CLAY.	2.20 – 3.30
Head Deposits	Light brown slightly clayey SAND. Sand is fine to medium.	3.30 – 3.60
Head Deposits	Soft light brown sandy CLAY. Yellowish brown SAND.	3.60 – 5.20
White Chalk Subgroup	Possible structureless CHALK recovered as white to cream slightly gravelly sandy SILT. Sand is fine to coarse. Gravel is fine to coarse sub-angular to sub-rounded flint and chalk.	5.20 – 5.80

The Site Photographs are presented within **Appendix A** and the Stratigraphic Logs are presented within **Appendix B**.

Climate Summary

The Met Office Climate Summaries have been reviewed for rainfall information for the three months preceding the site works (October 2024 – March 2025). October was drier than average, with the UK recording 103.5mm of rainfall, 84% of the long-term average. Some heavy showers and thunderstorms within the first week of October. The first half of November was dry, with only 6% of the long-term average rain falling by the 16th November. The second half of November saw increased rainfall, but only recording 68% of the month's average rainfall.

Storm Darragh brought significant disruption between the 6th and 8th December with prolonged spells of wind and rain. Rainfall was above average, provisionally recording 139.4mm of rainfall, 110% of the long-term average. Red warning issued within early January 2025 for Storm Isha, causing prolonged wind and rainfall across England. The middle of January has been predominately dry, with some light showers and snowfall across the south of England. Rainfall in the UK for January was below average with provisionally 79% of the long-term average recorded.

February started with little rainfall within the high-pressure system, however, it shifted mid-month as the weather became more unsettled. Overall, the rainfall was below average recording 72.7mm, approximately 76% of the long-term average February rainfall within the UK. The majority of weather within March has been settled dry conditions with some scattered showers within the beginning of the month.

Winter Groundwater Monitoring

The monitoring period extended from October 2024 to March 2025, monitoring once a month.

The table below summarises the results:

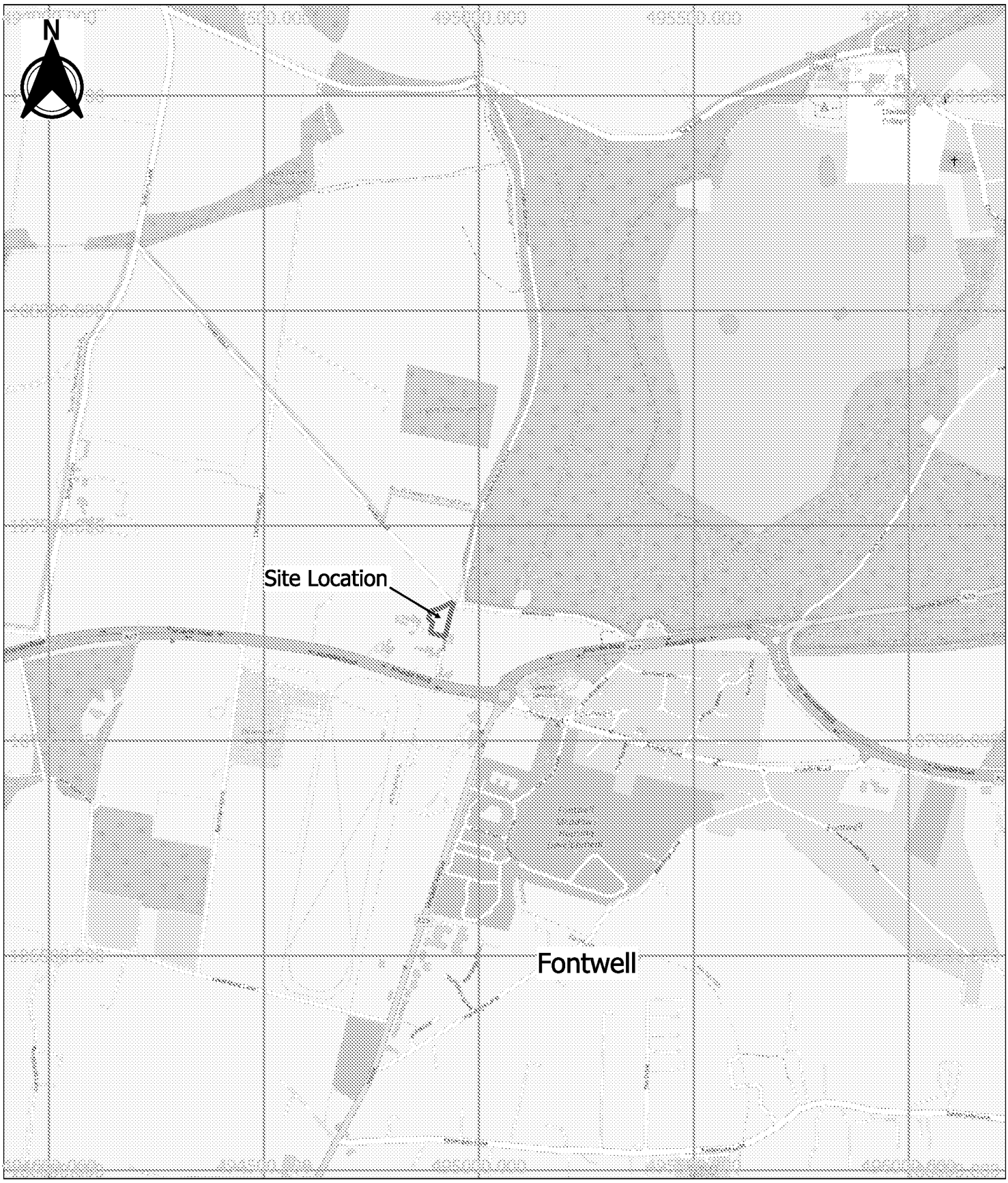
Date	Groundwater Level (mbgl)	Base of Borehole (mbgl)
31/10/2024	Dry	5.80
29/11/2024	Dry	5.80
19/12/2024	Dry	5.80
17/01/2025	Dry	5.80
28/02/2025	5.75	5.80
28/03/2025	5.78	5.80

We trust the above information meets your requirements and should you require any further clarification or assistance please do not hesitate to contact CE Ltd.

Kind regards,

[redacted]

Lee Saxton BSc FGS
Engineering Geologist
Constructive Evaluation Limited



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Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	Shopland Developments
Project	GI24.1171 - White Mill House, Fontwell, BN18 0TA
Title	Site Location Plan

Dimension	Size	Geolocation
m	A4	494913 , 107253

Figure 1

ARUN DISTRICT COUNCIL AL/29/25/DOC



ARUN DISTRICT COUNCIL AL/29/25/DOC

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Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	Shopland Developments
Project	GI24.1171 - White Mill House, Fontwell, BN18 0TA
Title	Site Investigation Plan

Dimension	Size	Geolocation
m	A4	494913 , 107253

Legend

- Site Boundary
- Borehole with standpipe installation

0 2.5 5 7.5 m

Figure 2

Site Photographs

Project Ref: GI24.1171

Site Name: White Mill House, Fontwell

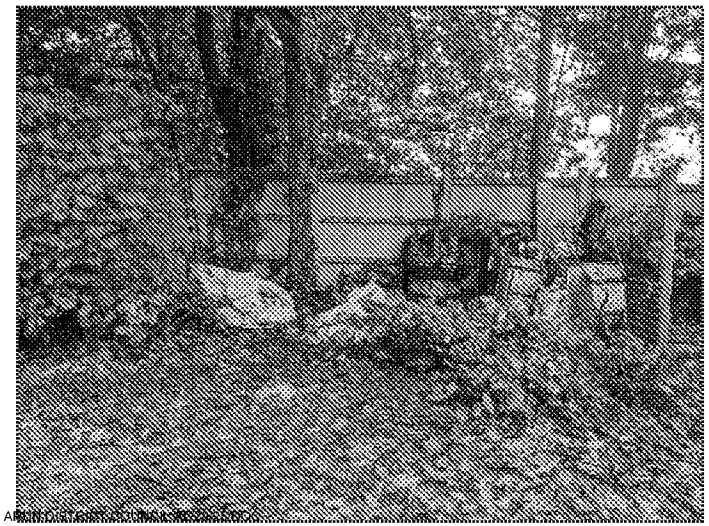
1.



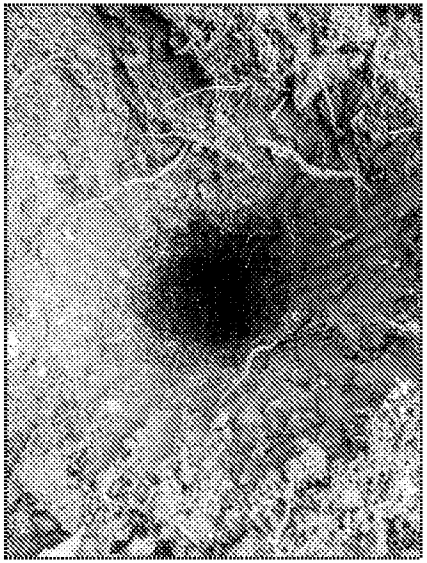
2.



3.



4.



1) Site entrance
2) Looking south towards BH1 position
3) BH1 position
4) BH1 0-1mbgl

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Site Photographs

Project Ref: GI24.1171

Site Name: White Mill House, Fontwell

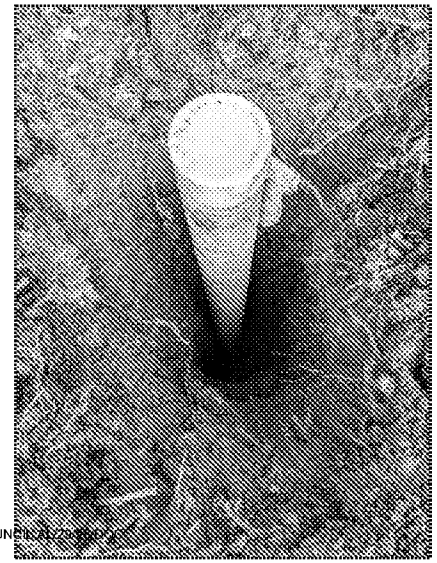
5.



6.



7.



8.



5) BH1 1-2mbgl

6) BH1 3-4mbgl

7) BH1 standpipe installation

8) BH1 flush-cover finished installation

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Borehole Log

Borehole No. **BH1**
Sheet 1 of 1

Project Name:	White Mill House	Project No. GI24.1171	Co-ords:	Hole Type WLS
Location:	Fontwell, BN18 0TA		Level:	Scale 1:31
Client:	Shopland Developments		Dates: 29/10/2024	Logged By LS

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
					0.25			Grass over brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular of flint. Abundant rootlets. (TOPSOIL)
					0.40			Brown slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular of flint and red brick. (MADE GROUND)
					1.00			Brown slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular flint. (HEAD DEPOSITS)
					2.20			Firm brown gravelly CLAY. Gravel is fine to coarse angular to sub-rounded flint. (HEAD DEPOSITS)
					3.10			Very stiff brown mottled black CLAY. (HEAD DEPOSITS)
					3.30			Firm light brown sandy CLAY. Sand is fine to medium. (HEAD DEPOSITS)
					3.60			Light brown slightly clayey SAND. Sand is fine to medium. Iron staining. (HEAD DEPOSITS)
					4.80			Soft light brown sandy CLAY. (HEAD DEPOSITS)
					4.90			Yellowish brown SAND. Sand is fine to medium. (HEAD DEPOSITS)
					5.20			Soft light brown sandy CLAY. Sand is fine to medium. (HEAD DEPOSITS)
					5.80			Possible structureless CHALK recovered as white to cream slightly gravelly sandy SILT. Sand is fine to coarse. Gravel is fine to coarse sub-angular to sub-rounded flint and white chalk. (WHITE CHALK SUBGROUP)
								End of Borehole at 5.800m

1 2 3 4 5 6

Remarks

1. CAT scanned prior to manual excavation of inspection trial pit. 2. No groundwater was observed. 3. Borehole terminated at 5.8mbgl due to refusal. 4. Borehole installed with standpipe and flush-cover finish.

AGS