

# Preliminary Site Investigation

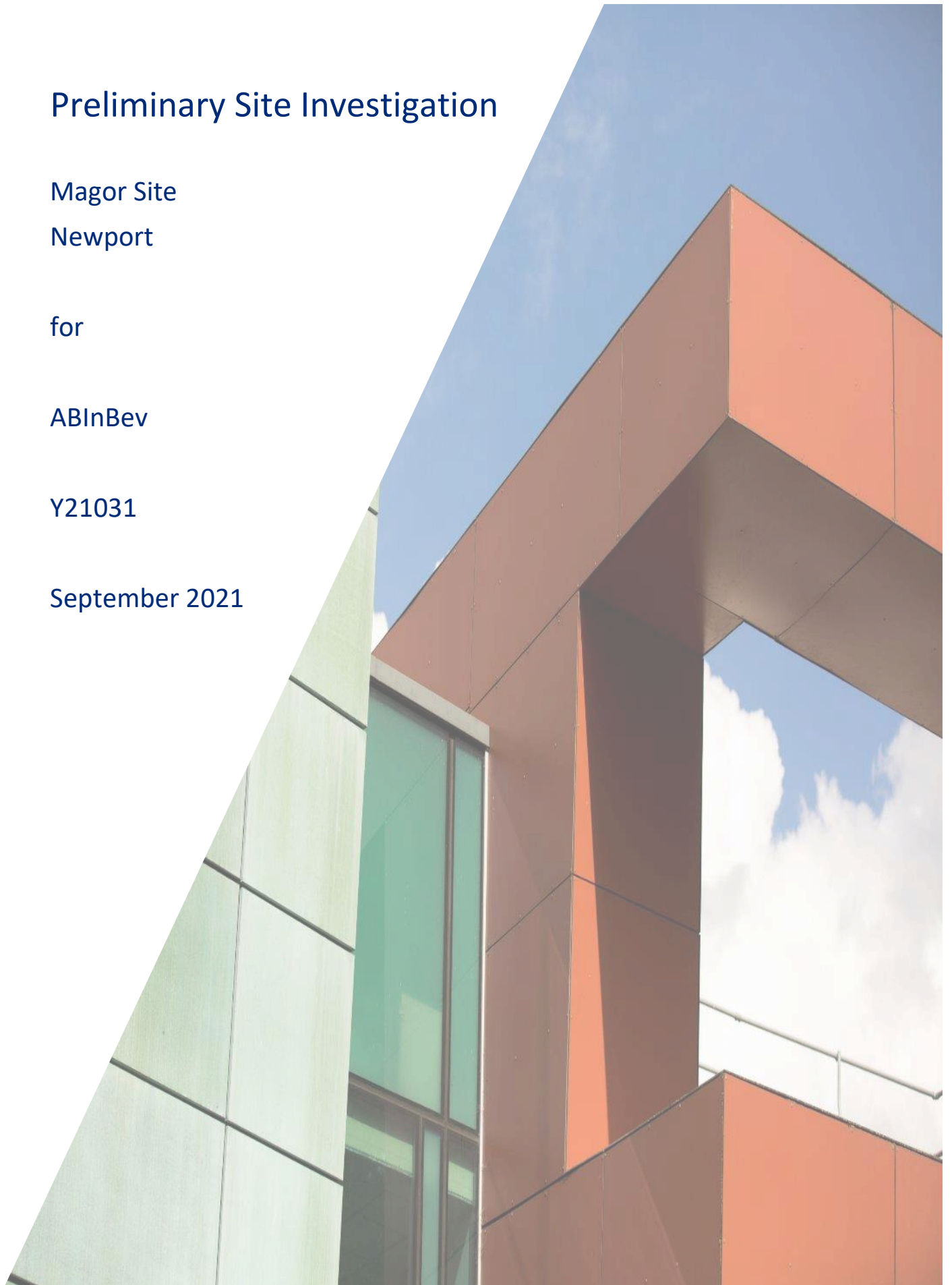
Magor Site  
Newport

for

ABInBev

Y21031

September 2021



## Preliminary Site Investigation

### Magor Site

for

### ABInBev

Revision	Date of issue	Comments	Prepared By	Checked By
-	Sept 2021		RH	SG

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## 1.0 Site setting

### 1.1 Site setting

The site is part of the existing brewery and covered by existing tarmacadam car park and a large, grassed bund, the ground conditions are reported to comprise Tintern Sandstone Formation, previous investigation by Patrick Parsons on the wider site area have recorded varying amounts of made ground over clay (weathered rock) which in turn is underlain by both sandstone and mudstone.

### 1.2 Proposed Works

We allowed for all proposed borehole locations to be cleared using Ground Probing Radar (GPR) to ensure they are not positioned on or close to services, service pits will be excavated prior to drilling. Following service clearance, the investigation comprised of two separate visits over August/September and comprised of window sampling using a small tracked rig which would be sufficient to assess the ground conditions across the area highlighted. In addition to the window sampling, DCP testing in the soft landscaped areas to provide CBR data for future pavement design.

We included for a limited amount of geochemical and geotechnical testing so recommendations can be made in respect of foundations and floor slabs etc. In addition, we have included for a limited amount of chemical analysis inform offsite disposal, as necessary.

Upon completion of testing a Geotechnical Assessment Report would be produced; this would include details of all identified geotechnical and contamination hazards and would include full recommendations in respect of foundations and floor slabs etc.

### 1.3 Works to be completed

#### Proposed Works

Chemical Analyses Completed – week commencing 20<sup>th</sup> September 2021

Geotechnical Analyses Completed – week commencing 27<sup>th</sup> September 2021

Issue of Report – following receipt of all lab reports estimated week commencing 27<sup>th</sup> September aiming for 30<sup>th</sup> September

## 2.0 Review of site logs

### 2.1 Observations

A preliminary review of the raw data has been undertaken to inform the ongoing design and provide a validation of the expected ground conditions

#### Empty Keg Storage

Hardstanding (0.2 – 0.3m) and sub fill aggregate materials were encountered to around 0.4m – 0.6m

Beneath that there was superficial geology of slightly sandy, slightly gravelly clays stiff becoming softer with depth and increased moisture content. Rootlets and organic matter were found throughout.

WS11 was progressed to 3m depth with thicker superficial deposits (clayey gravelly sands) overlying a red/purple/grey silt/sandstone 2.95m with weathered rock fabric evident.

Groundwater was struck at this location at approximately 2.5m.

WS12 refused to progress beyond 1m depth.

All locations refused to progress deeper at a hard sand/silt horizon

#### Car Park Area

WS16 and WS17 were on soft ground with WS15 and WS18 on hardstanding.

A shallow depth of topsoil and superficial slightly sandy slightly gravelly clays overlies highly weathered bedrock encountered at around 1 – 2m depth.

Laminated fine sandstone (5cm thick) was found at 2.7m depth at WS18.

Highly weathered bedrock comprised grey/red brown mottled clay/silt with highly variable patches of harder mud/siltstone.

Superficial deposits and weathered bedrock are stiff at surface become softer (higher water content) with depth immediately before refusal depth.

Refused to progress at ranges between 1m at WS16 and 3m at WS17.

\*200kN/m<sup>2</sup> even

#### Overview

The ground conditions appear consistent across the areas with stiff to very stiff clay with shear strengths >120kPa underlain by mudstone and sandstone with repeated SPT N value refusals

WS7 refused at 1m so this suggests that it is straight on to rock. The CP holes show more clay to a slightly greater depth 3-4m as opposed to 1-2m in the window sample boreholes but again

this suggests that if more due to the drilling technique softening the mudstone as the hole progresses. The SPTs were consistently around 50

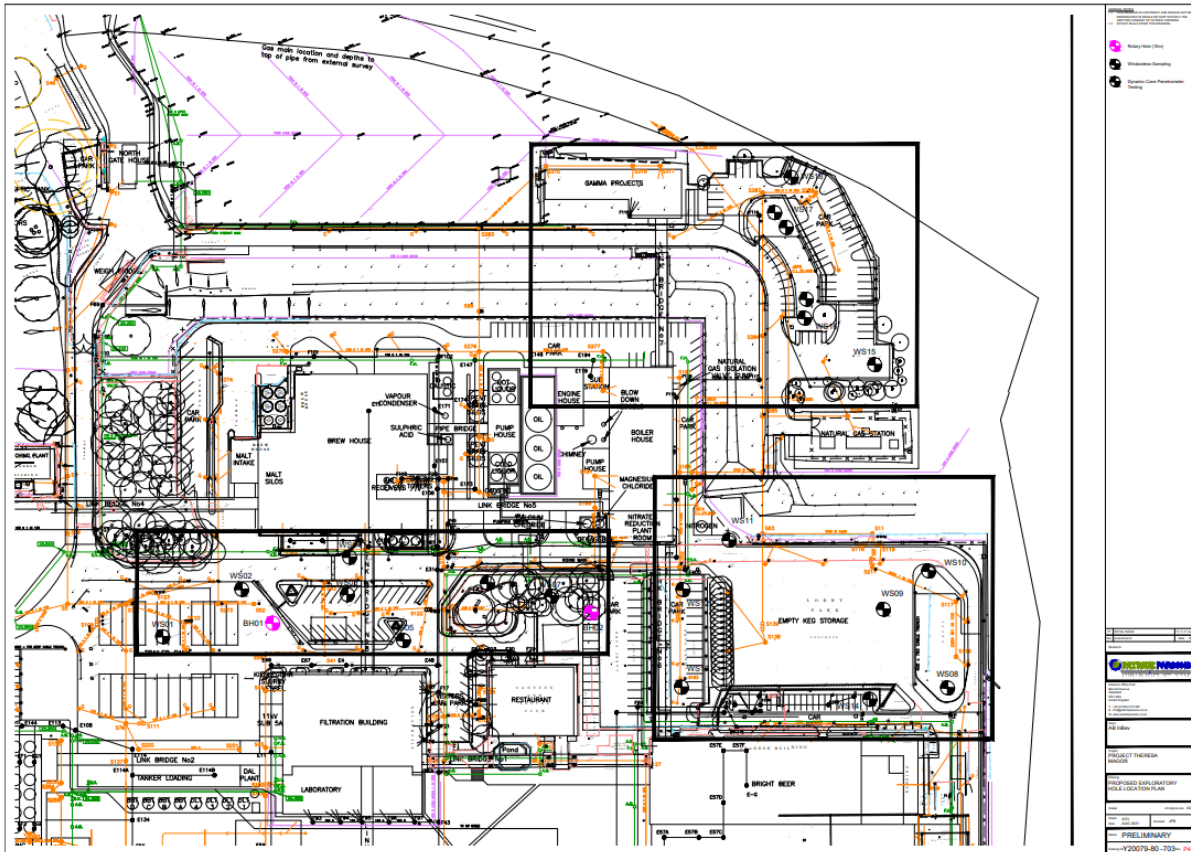
We would anticipate a bearing capacity of 200Kn/m<sup>2</sup> on the weather rock generally at about 2m depth though there might be some localized deepening required where the residual soils have a deeper weathering profile (~3m)



Sample cores

### 3.0 Locations

#### 3.1 Location of testing regime



## UK locations:

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### **London**

Wakefield

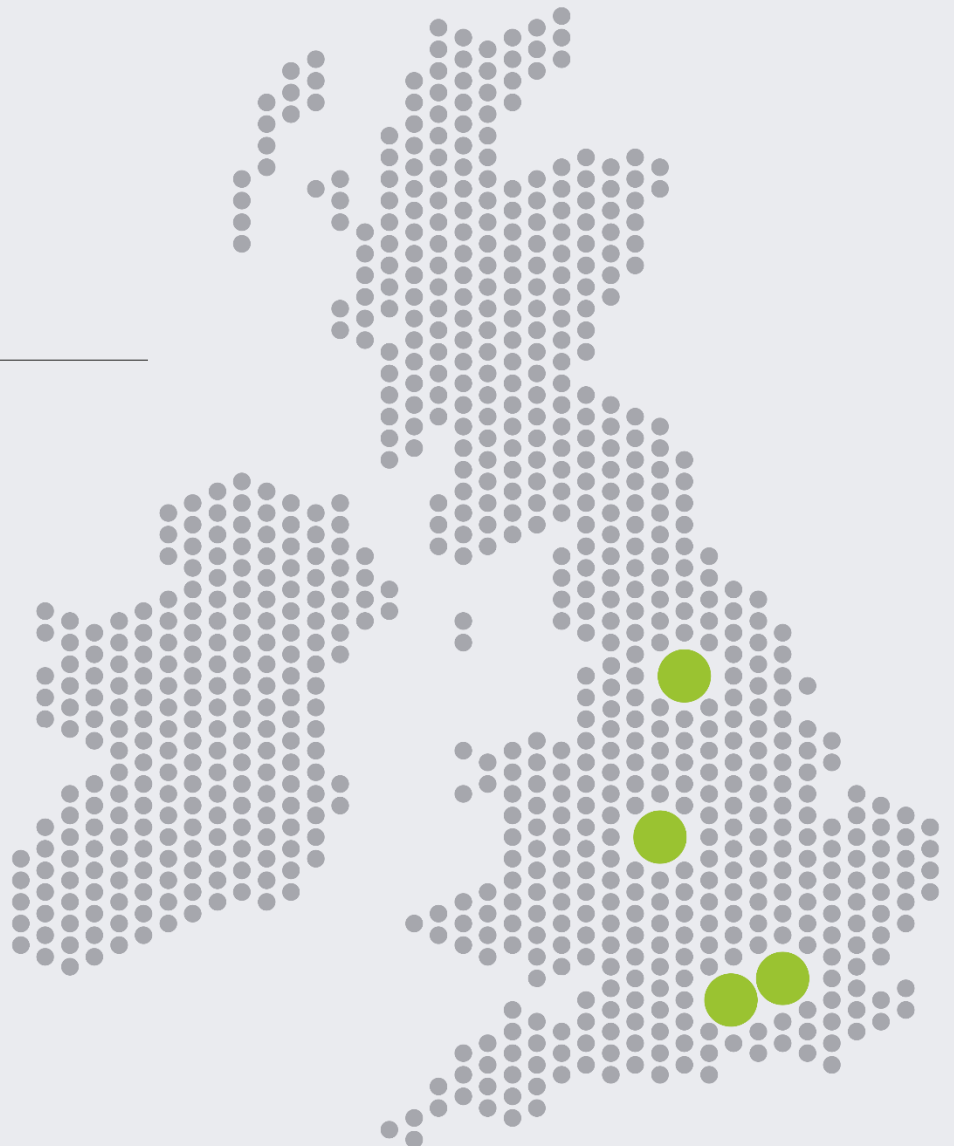
Birmingham

Guildford

## International locations:

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Dubai



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