



## 6<sup>th</sup> Form Centre, Barnsley College Ground Investigation Statement

Dec 2013

### Site Location and Description

The site is located in the centre of Barnsley between Westgate to the north, Shambles Street to the south, St. Mary's Place to the east and John Rideal House to the west. It slopes down from Westgate to St. Mary's Place.

Currently it is occupied by Barnsley Central Library, which was constructed in 1973 and is located in the south west corner. The Shambles Street frontage is occupied by a run of two storey shop units with a two storey car park behind. The upper deck level of the car park is at the same level to and is accessed from Westgate. The lower level is accessed at the north west corner of the site from St. Mary's Place.

### Site History

The Ordnance Survey map from 1852 shows the site was occupied by a series of narrow yards, with housing on each side, running down from Westgate to Shambles Street. Three inns are located on Shambles Street. This street plan was essentially unchanged until the middle of the Twentieth Century when the old yards were gradually cleared and the land appears to have been used for car parking until development of the library and shop units.

### Site Geology and Mining

Geological records indicate the site is immediately underlain by the Kents Rock Sandstone of the Middle Coal Measures. The Sandstone overlies the Kents Thin and Kents Thick coal seams.

A copy of the mineral report for the site prepared by SYMAS (South Yorkshire Mining Advisory Service) and dated May 2013 is attached to this statement.

The report concludes that;

1. The site is stable from the deep mining aspect.
2. The Kents Thin coal seam is likely to be present beneath the site at a shallow depth (estimated 5m to 20m). The risk of ancient unrecorded mine workings being present and any associated instability or health and safety hazards is considered to be LOW.
3. It is recommended that during any site investigation works that boreholes should be drilled to confirm the depth and condition of the Kents Thin coal seam.

### Site Investigation

A site investigation will be undertaken to;

1. Determine the below ground strata properties and depth to rock for foundation design.
2. Check for the presence of old basements from the original properties on the site although it is considered most of these will have been removed by later developments.
3. Investigate the form and structure of the steep bank running along Westgate.
4. Confirm the depth and condition of the Kents Thin coal seam.
5. Investigate and assess any below ground contamination including assessing any protection requirements to substructure concrete and contamination carried by ground water.
6. Record and monitor ground water levels and gas concentrations.
7. Assess any geotechnical risks.

**creative minds** safe hands

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# MINERAL REPORT



9th May, 2013

Date:

My Ref: PJ/M4369/9

## CONFIDENTIAL

### SHAMBLES STREET REDEVELOPMENT.

#### INTRODUCTION

The land under consideration for redevelopment is shown edged orange on the attached plan no. M4369/9A.

This report provides a review of the geology and history of the site and an assessment for the potential of coal mining and ground instability legacy issues.

#### GEOLOGICAL INFORMATION

Geological records indicate the site to be immediately underlain by Kents Rock sandstone of the Middle Coal Measures. There are no recorded Geological faults in the immediate area.

The Kents Thin coal seam is conjectured to outcrop approximately 40m to the south west of the site and will dip gently beneath the land to a relatively shallow depth. The Kents Thin seam has a limited thickness of approximately 60cm and is of poor quality in the area.

The Kents Thick seam is approximately 15 to 20m deeper than the Kents Thin seam and will not affect the site.

#### MINING INFORMATION

##### Shallow Mine Workings

The Kents Thin seam is likely to be present beneath the site a depth of approximately 5 to 20m. SYMAS has no records of any shallow mine workings beneath the area.

The risk of unrecorded ancient mine workings/mining legacy issues being present in the Kents Thin seam beneath the site is considered to be LOW.

##### Deep Mining

There are no records of any deep coal mine workings beneath the site. However two disused deep mine shafts are recorded approximately 140m west of the site (beneath Gateway Plaza). The shafts were known as Pinfold Colliery, are approximately 82m deep, and accessed the Barnsley seam. It is therefore possible that mine workings are present beneath the site in the Barnsley seam which date back to the 1800's. Any such old mine workings will be in excess of 100m deep and would not now affect the stability of the site.

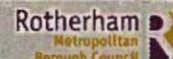
The land now lies remote from the active coalfield and should not be influenced by deep mining subsidence for the foreseeable future.

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# MINERAL REPORT



Continuation Sheet

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## COLLAPSE OF WELL SHAFT

A well shaft was discovered on St Marys place immediately to the east of the scheme area. In 1982 a collapse of ground occurred in the position shown on the attached drawing M4369/9A and the attached photograph. The feature was backfilled and covered by a reinforced concrete cap. A second well was discovered in 1998 on saddler gate in the position shown on the plan and was again suitably stabilised.

Whilst the risk of further wells being present within the scheme area cannot be entirely ruled out, the risk of any such further occurrence is consider to be LOW.

## FORMER LAND USES

Historical ordnance survey plans indicate previous built development, probably residential or light retail in nature, prior to the construction of the existing retail units, car park and library. The 1932 edition ordnance survey plan is reproduced on the attached drawing M4369/9B.

## LANDFILL/MADE GROUND

There are no recorded landfill sites nearby. Made ground, remnant foundations and services may be present on the site associated with the previous built development.

## FUGITIVE GAS

SYMAS has no records of any fugitive gas emissions.

## CONCLUSIONS

1. The site is stable from the deep mining subsidence aspect and should remain so for the foreseeable future.
2. The Kents Thin coal seam is likely to be present beneath the site at a shallow depth (est. 5 to 20m) The risk of ancient unrecorded mine workings being present, and any associated instability or health and safety hazards, is considered to be LOW. However, in the event of any substantial redevelopment/investment it would be prudent to undertake a limited borehole site investigation to confirm the depth and condition of the Kents Thin Coal seam. Initially boreholes should be drilled in the south western end of the site where the seam will be at its shallowest. These works could be incorporated into the usual near surface investigations to establish appropriate foundation design.
3. Consultation with the Coal Authority is required prior to any investigation or operation that involves entry into any coal or mines of coal, including coal mine shafts, adits and workings. The Documentation which supports the Coal Authority's Permissions procedures can be viewed at [www.coal.gov.uk/services/permissions/index.cfm](http://www.coal.gov.uk/services/permissions/index.cfm).

# MINERAL REPORT



Continuation Sheet 3

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Report prepared by P. James 9th May, 2013.

A handwritten signature in black ink, appearing to be "P. James", written in a cursive style.

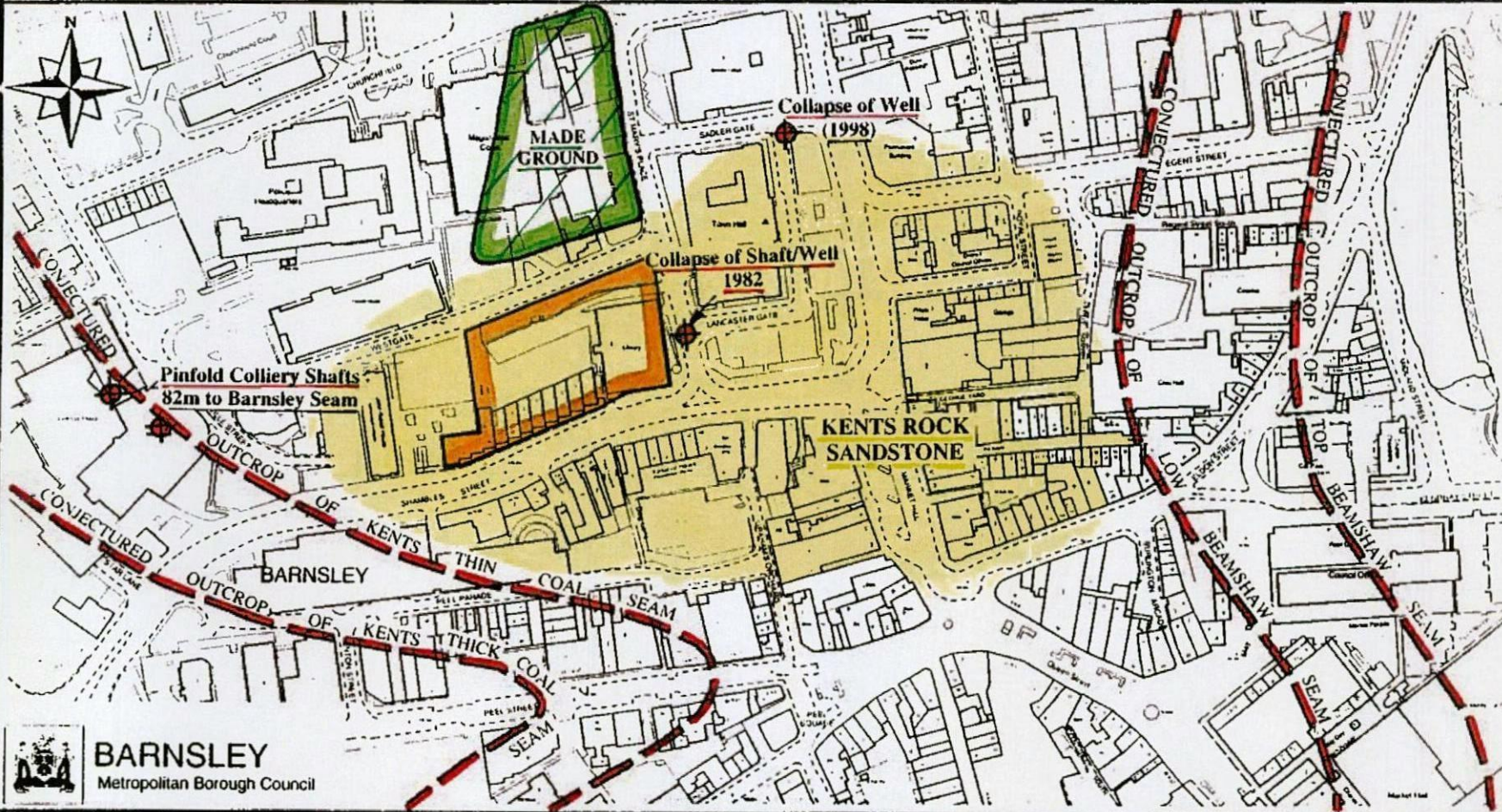
P. James,  
Principal Mining Engineer.

DRAWING TITLE

### SHAMBLES STREET REDEVELOPMENT BARNSELY

DRAWING NO.

M4369/9A



**BARNSELY**  
Metropolitan Borough Council

SCALE  
1:2500

DATE  
7.5.13

**SOUTH YORKSHIRE MINING  
ADVISORY SERVICE**

O.S REFERENCE  
SE 3406

DRAWN BY  
AS

CHECKED BY  
*[Signature]*

P. JAMES BSc (Hons)  
PRINCIPAL MINING ENGINEER

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DRAWING TITLE

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