YORK PLACE, MANSFIELD ROAD, NOTTINGHAM

STUDENT ACCOMMODATION

Report on Archaeological Field Evaluation

Prepared for: Hydrogen York Street Limited



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Summary

SLR Consulting was instructed by Hydrogen York Street Limited to provide an archaeological field evaluation and the report presented in this document in connection with their future development of a site on Mansfield Road, Nottingham (the 'Site'), the site of the former York House (now demolished).

A DBA prepared by SLR Consulting prior to commencement concluded that the Site had the potential to contain archaeological remains relating to post-medieval suburban development and possibly the medieval site of Whiston and / or remains of Nottingham's pottery and glass-making industries. It was also known to contain extensive caves and cellars relating to the Nottingham Brewery and earlier occupation within the site, with potential for further currently-unknown caves to be present.

The development had the potential to harm buried surface archaeological remains outside an area where the existing floor slab and foundations are to be re-used.

Planning Condition 5 imposed on the development required "the minimum of an archaeological watching brief" on groundworks. In order to manage the risk to the construction programme, by agreement the condition was addressed through an initial stage of archaeological field evaluation, with provisional for mitigation excavation to follow should it be required.

The geotechnical and archaeological trial pit records show that there is no significant potential for surface archaeological remains to exist on the Site and to be harmed by the construction of the development. The presence of caves suggests that surface remains would have been present but they appear to have been removed during the various stages of historic site development.

The 'destroyed caves' have been shown to be partially intact but filled with granular material. Their roof has been breached at least in places, including at the location of the crane base.

The construction of the crane base is likely to add to the existing harm to the 'destroyed caves' but no impact to them is anticipated beyond the footprint of the crane base.

The planning archaeologist has asked for a survey to be made of any cave walls which may be exposed within the area of the crane base during its construction. This work will be carried out at the time of construction; there will be no safe access into the hole and measurements, written observations and photographs will be taken from the sides of the hole and the results incorporated into a revised version of this report, in accordance with the project WSI.



1.0 Introduction

1.1 Project background

SLR Consulting was instructed by Hydrogen York Street Limited to provide the archaeological field evaluation reported in this document in connection with their future development of a site on Mansfield Road, Nottingham, the site of the former York House (now demolished).

The fieldwork and report were required to provide "the minimum of an archaeological watching brief" required by Planning Condition 5 imposed on the development (as it relates to buried surface archaeological remains but excluding caves). The work comprised an initial stage of archaeological field evaluation through the excavation of trial pits, with potential mitigation excavation to follow should it be required.

1.2 The Site

The Site is located on the site of the former York House, Mansfield Road, Nottingham, NG1 3FB. It is now clear of significant buildings following the recent demolition of York House. The Site slopes down from north to south and is bounded by Mansfield Road to the west, York Street to the east, Union Road to the south and an adjacent property to the north. The location of the site is shown in Figure 1-1.



Figure 1-1
Site location

1.3 The Scope of Work

The work was carried out in accordance with a written scheme of investigation prepared by SLR¹ which detailed an initial stage of archaeological field evaluation through the excavation of trial pits with potential expansion of the excavated area in any areas which contain or have potential to contain archaeological remains.

1.4 The Planning Background

Nottingham City Council's (NCC) committee report on application number 18/02566/PFUL3, dated 20th March 2019, recommended granting permission subject to a number of conditions of which Draft Condition 5 relates to archaeology. The condition states:

"No development shall commence until a programme of archaeological works involving the minimum of an archaeological watching brief has first been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that any archaeological remains of significance are safeguarded in accordance with Policy BE16 of the Nottingham Local Plan."

In the Committee Report (20th March 2019) the planning archaeologist (Mr Scott Lomax) advised as follows:

"The two known cave systems within the site boundary are considered to be of significance and are without known parallel within the city. Parts of the caves date to the 18th century and the systems as a whole represent evidence of use as a beer cellar for a demolished public house, as well as evidence of storage for a brewery and uses as a Second World War air raid shelter.

It will be important to ensure the preservation of the caves within the development. To this end it will be necessary for the local planning authority to have confidence that the proposal is structurally sound in enabling the development to take place without negatively impacting the caves.

The latest structural information supplied by the applicant provides a lot more confidence in the ability to construct the proposed building without impacting the caves. Further concrete column tests are being carried out and it is relevant that final tests confirm that all columns are suitable. However, there is sufficient information now to agree that the scheme to protect the caves appears to be feasible and a planning condition is recommended that the development is implemented on the basis that the foundation design will follow the principles detailed in the approved Structural Design Philosophy document and that any deviation from that document must be agreed with the Local Planning Authority. It will be necessary to maintain access to both cave systems (which is intended) in order to comply with emerging policy. There will also need to be a further planning condition for an archaeological watching brief during the breaking of ground from the surface, which must be undertaken by a suitably qualified and experienced archaeological contractor."

1.5 Consultations

The client has been provided with a copy of an NCC internal email dated 1/4/2019 in which the planning archaeologist stated that

¹ SLR Consulting 2019: York Place, Mansfield Road, Nottingham - Student Accommodation - Written Scheme of Investigation for Archaeological Evaluation and Potential Mitigation SLR Reference 403.09368.00001



"The archaeological watching brief should be undertaken by a suitably qualified and experienced archaeological contractor (who should be a Registered Organisation with the Chartered Institute for Archaeologists) in accordance with the Standards and guidance of the Chartered Institute for Archaeologists and in accordance with a Written Scheme of Investigation (WSI) to be approved by the City Archaeologist. The WSI should be produced in response to a brief to be issued by the City Archaeologist."

SLR received an email (2/4/19) from the planning archaeologist stating that:

"Further ground investigations would be worthwhile in order to more fully understand the character of any deposits (and other remains) in areas of the site. Such investigation would be beneficial in terms of understanding the archaeological potential, whilst also reducing the potential risk of identifying areas where significant archaeological remains exist during groundworks for the construction. Further ground investigations will also be of use to the developer by providing more geotechnical information.

Looking at the plans you have supplied, showing the locations of the investigations, there are sizeable gaps in the distribution of the pits and boreholes. I would suggest some further test pitting in the area outlined in green on the SLR plan, and the area to the north which is outlined in orange. Historic map regression (using maps including those of Dearden, Salmon, later OS maps and possibly also Wood's map of 1825 and Smith and Wild's map of 1820, all of which show the site) will help identify areas that are particularly worth targeting with the investigations.

Depending upon the depth of the sandstone bedrock, the test pits could be enlarged to form small trenches for further investigation."

In a further email of 3/4/19 the planning archaeologist stated that:

"I can confirm there would be no need to undertake archaeological works in those parts of the site where ground investigations demonstrate the disturbance is significantly below the projected original rock level."

During a site meeting on 29th May the following general approach was agreed, with reference to areas of future disturbance (Figure 1-2):

- in the area marked 'Slab to be retained', no archaeological work is required due to the lack of future ground disturbance there;
- in the south-eastern area labelled 'Slab to be Removed' construction excavations will be
 archaeologically monitored with contingency arrangements for dealing with remains which are
 unexpectedly found shallower than the proposed excavation to c.1m or less below surface;
- in the areas of the petrol tanks no further work is required due to existing ground disturbance;
- in the north-western area marked 'Slab to be removed' and in the area marked 'Tarmac to be removed' (excluding petrol tank area), there will be further trial-pitting to establish the potential for any preservation of 'surface archaeological remains', to be followed if necessary by wider excavation to record them prior to construction;
- no archaeological response is required in connection with the removal of the above ground brick structures on the site; and
- the current physical state of the 'destroyed caves' remains uncertain and the archaeological response
 to any impacts on them due to inserting new foundations will be determined following further limited
 investigation which will commence with the breaking of an inspection hole through the brickwork
 which seals the 'destroyed caves'.

This approach was further modified by agreement with the planning archaeologist due to developing knowledge of site conditions, as reported in the remainder of this document.



1.6 Initially-perceived Archaeological Potential

A DBA prepared by SLR² concluded that the Site had the potential to contain archaeological remains relating to post-medieval suburban development and possibly the medieval site of Whiston and / or remains of Nottingham's pottery and glass-making industries. It is known to contain extensive caves and cellars relating to the Nottingham Brewery and earlier buildings within the site, and there is the potential for further currently-unknown caves to be present.

Historic mapping shows the Site north of the site of the Rose of England public house occupied in 1820 and 1830 by St. Mary's Workhouse. The establishment was greatly extended or moved to a new, much larger site on the east side of York Street in c.1840. The Nottingham Brewery was then built in 1847 on the Site, but historic mapping shows that much of the old Workhouse still stood until at least 1861. In 1887 the brewery had become a large concern, and was entirely rebuilt; this work probably included the construction of the extensive cellars, cutting through an earlier cave system. The multi-storey York House replaced the Nottingham Brewery buildings in 1962.

Building footprints, potentially dated pre-1844 and certainly pre-1880 by reference to historic mapping, are shown in Figure 1-2.

Known and potential archaeological remains on the site were considered to comprise firstly 'surface archaeological remains' (i.e. those lying beneath the existing surface but over the bedrock), and secondly the system of caves and cellars and their historic infrastructure which lies at depth, having been cut down through or below the top of the rock.

Along the western Site frontage completed geotechnical trial pits indicated that there is extensive cellarage and disturbance from a petrol filling station which had probably destroyed any surface archaeological remains formerly present. There was however unverified potential for preservation of surface archaeological remains behind the early mapped buildings but west of the area where the slab will be preserved.

In the south part of the Site there was an increasing depth of existing cut towards the north-west from Union Street, caused by the construction of the former underground car park to York House. Recent overburden deposits extend to a depth of over 1m below surface over the majority of the area. Bedrock is shallow at the north-west end where the cut has been the deepest, and this part of the area was considered to have the lowest potential for preserving surface archaeological remains.



² SLR Consulting January 2019: *York Place, York Street Nottingham - Archaeological Assessment* (SLR reference 403.09368.00001)

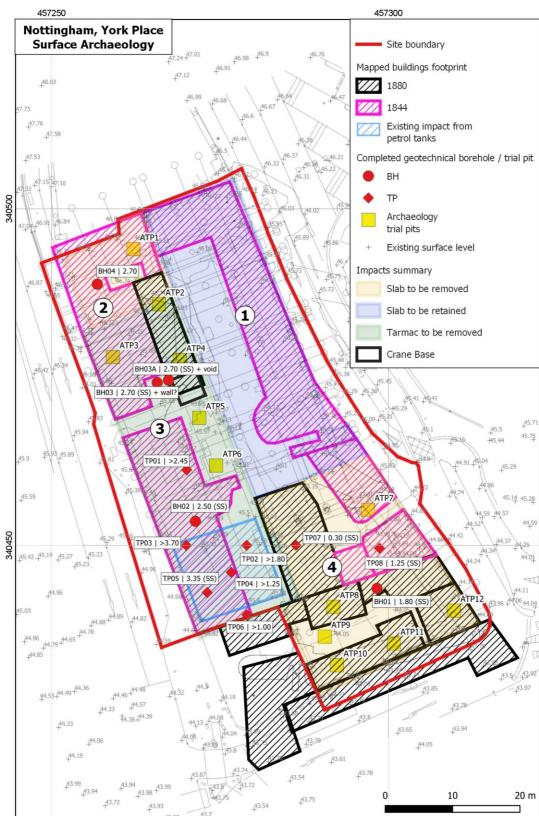


Figure 1-2
Historic Building Footprints, Investigations and Future Impacts



1.7 Potential Impacts from Development

In order to preserve the sub-surface archaeological remains the building is to re-use the existing piling and floor slab from York House. Outside the area where the existing slab will be retained (1 in Figure 1-2), groundworks for the new building had the potential to damage or destroy potential surface archaeological remains.

A crane base will be positioned on part of the group of already partially collapsed 'destroyed' caves. This will require extending the existing breaches in the cave roof within the footprint of the crane base and compacting the existing granular fill in situ if necessary, followed by traditional CFA piles through the compacted fill. Impacts on the 'destroyed caves' will be limited to the footprint of the crane base.



2.0 **General Arrangements**

2.1 Aims and Objectives

Aims

The investigation addressed the following aims:

- identify any impact which the proposed development would have on surface archaeological remains;
 and
- scope and implement any mitigation measures required.

Objectives

Initial trial pits were located in order to address the following objectives:

- identify any parts of the site which have not been disturbed by cellars and would be disturbed by the development and would thus have the potential to contain archaeological remains;
- implement further investigation of any areas where archaeological remains are preserved and would be affected by the development;
- provide an excavation archive in publicly accessible and secure permanent storage; and
- disseminate the results of the work in an appropriate venue, to a level of detail proportionate to the significance and scale of the findings.

Had significant archaeological remains been present, the key general research question to be addressed through their wider investigation would have been:

what was the nature, date and significance of any occupation or industrial use of the site? (remains
which are anticipated in particular are those of the historic settlement of Whiston and nearby pottery
and glass-making).

2.2 Personnel

The planning archaeologist is:

Scott Lomax
City Archaeologist ('planning archaeologist')
Nottingham City Council
Nottingham City Museums and Galleries
Waterworks Building
Castle Boulevard
Nottingham
NG7 1FB
0115 876 1854

The archaeological consultant is:

Gavin Kinsley MCIfA
Principal Archaeologist
SLR Consulting
Aspect House, Aspect Business Park
Bennerley Road



Nottingham NG6 8WR Tel: 0115 964 7280

Site work and reporting were undertaken by SLR staff.

2.3 Standards

SLR is a Registered Organisation with the CIfA (Chartered Institute for Archaeologists), which is an audited status ensuring compliance with their published standards and guidance. The assessment has been compiled in accordance CIfA standard and guidance³ and as required by the planning archaeologist.

SLR operates a quality assurance system confirming to ISO 9001.

2.4 Monitoring

All archaeological work was monitored by the planning archaeologist, directly on site and / or through summary reports and telephone / email with SLR as appropriate.

The planning archaeologist was updated by SLR as appropriate as the work proceeded and was invited to visit the site by prior arrangement through SLR during the fieldwork in order to discuss any issues raised with SLR.

2.5 Programme

The fieldwork commenced with a laison visit in late May, the excavation of Archaeology Trial Pits ('ATP') 1-6 on 24th June 2019, ATP7-12 on 11th September 2019 the area excavation on 3rd October 2019.

2.6 Destination Museum and Report Deposition

The destination museum was identified by the archaeological contractor prior to the commencement of fieldwork; it was:

Nottingham City Museums and Galleries Ann Innscker Brewhouse Yard Museum Castle Boulevard Nottingham NG7 1FB

Tel: 0115 915 3600

However, due to the lack of artefacts it is proposed that report dissemination will achieved by the setting-up of an OASIS record and the appending of this report to it.

³ Chartered Institute for Archaeologists 2014: Standard and Guidance for Archaeological Field Evaluation



3.0 Fieldwork Methodology

3.1 Excavation

3.1.1 General areas of work

The western frontage and the southern parts of the Site were investigated through 12 additional archaeological trial pits numbered ATP1 to ATP12 (Figures 1-2, 3-1). The locations of these pits were chosen to fill in gaps left in the distribution of the geotechnical pits such that when combined there would be a sufficient sample to assess the potential of the Site to contain surface archaeological remains.

The work took place in three stages: Stage 1 was the excavation of TP1 to ATP6 behind the western frontage, Stage 2 the excavation of ATP7 to ATP12 in the south part of the Site, and Stage 3 an area excavation around ATP7 to ATP12.

Pits ATP1 to ATP6 were set out using hand measurements from features recorded in the topographical survey. ATP to ATP 12 were set out using a survey-grade GPS with appropriate levels taken. The elevation of the area excavation around ATP7 to ATP12 was the formation level of construction (at 43.0m AOD) and was determined by the Site contractor during their site strip to formation level. There were slight adjustments of location to avoid voids and discovered utilities.

The pits were approximately 3x1m in plan, excavated by a mechanical excavator using a toothed bucket under continuous archaeological supervision. The exposed stratigraphic sequence was recorded and interpreted by the monitoring archaeologist. The trial pits and stripped area were recorded in written descriptions and photographs showing deposits and their depths below surface. Photographs were taken in colour digital format.

ATP1 to ATP6 were intended to be excavated to a depth of up to 2.5m or to bedrock or to the top of archaeological remains, whichever was the shallower. However in the event excavation was terminated when substantial slabs were discovered whose removal might have harmed the caves beneath; given the depth of the slabs there seemed little prospect of surface archaeological remains surviving beneath them.

For ATP7 to ATP12 the current surface (slab or tarmac) was removed without archaeological supervision. The pits were due to be excavated to the formation level of the Site (43m AOD), but the approach was changed following to the discovery of a lower concrete slab in most of them which extended from the southern boundary of the Site as far north as the northern wall of the Rose of England public house. ATP9 was not excavated and instead, as an alternative to further pitting and with the agreement of the planning archaeologist, the area around these pits was fully excavated to the formation level as determined by the demolition contractor, under archaeological supervision. This was considered to be a more effective approach to investigating the Site in this area. A record was formed in the same manner as that of the Trial Pits 1-6.

Two trial pits were dug by the demolition contractor to investigate the ground conditions within the location of the crane base required for construction purposes.

Impacts and pit locations are shown in Figure 3-1.



457300 Nottingham, York Place Known caves outline **Trial Pits** (survey by others) 'Destroyed caves' (survey by others) Existing petrol_tanks Impacts summary Slab to be retained Slab to be removed Tarmac to be removed Crane base BH04 | 2.70 Geotech SI BH 1 Archaeology trial pits Area of lowest slab strip BH03A | 2.70 (SS) + void BH03 | 2.70 (SS) + wall? 3 TP01 | >2.45 BH02 | 2.50 (SS) 340450 TP07 | 0.30 (SS) TP03 | >3.70 TP02 | >1.80 TP08 | 1.25 (SS) 4 TP05 | 3.35 (SS) BH01 | 1.80 (SS) TP06 | >1.00 0 10 15 20 25 m + 43.73

Figure 3-1
Development Impacts and Investigation Locations



4.0 Results

The deposit sequences found in the pits are set out in Table 4-1 and illustrated in Figures 4-1 to 4-12.

4.1 Trial Pits

Table 4-1
Trial Pit Deposit Sequences

| Trial Pit | Description | Figure |
|-----------|--|--------|
| ATP1 | concrete and brick rubble to 1.3m bgl ⁴ then a substantial slab | 4-1 |
| ATP2 | flagstones and brick rubble down to 1.55m bgl then concrete slab and pile cap with ground beam in one corner. | 4-2 |
| АТР3 | tarmac and brick rubble to 2.5m bgl, sand exposed at base of hole | 4-3 |
| ATP4 | sand and brick to 2.35m bgl then slab | 4-4 |
| ATP5 | rubble-filled cellar lined with walls of red brick over yellow brick with holes to 2m bgl then slab | 4-5 |
| ATP6 | rubble-filled cellar on east side of pit with wall of red brick over yellow brick down centre of pit; east side excavated to 1.7m bgl to slab | 4-6 |
| ATP7 | Exposed bedrock at surface | 4-7 |
| ATP8 | Loose grey to yellow sand and building rubble to 0.3m bgl then a concrete slab | 4-8 |
| ATP9 | Loose grey to yellow sand and building rubble to 0.3m bgl then a concrete and bitumen slab | 4-9 |
| ATP10 | Loose grey to yellow sand and building rubble to 0.3m bgl then a concrete and bitumen slab. Beneath the slab was a 0.25m thickness of broken concrete and building rubble then black friable sandy clay over loose yellow sand and brick rubble (base not reached) | 4-10 |
| ATP11 | Loose grey to yellow sand and building rubble to 0.35m bgl then a concrete slab | 4-11 |
| ATP12 | Loose grey to yellow sand and building rubble to 0.25m then a concrete slab | 4-12 |



⁴ Below ground level

Figure 4-1



Figure 4-2 ATP2



Figure 4-3



Figure 4-4 ATP4





Figure 4-5 ATP5



Figure 4-6 ATP6





Figure 4-7 ATP7



Figure 4-8 ATP8





Figure 4-9 ATP10



Figure 4-10 ATP10 Section



Figure 4-11 ATP11



Figure 4-12 ATP12





Figure 4-13 Looking down shaft



Figure 4-14 Looking up Shaft





4.2 Area Excavation

Sandstone with no archaeological features showing was exposed north of the excavated area, west of ATP7. Elsewhere in this area the stripping of the Site down to formation level of 43m AOD, roughly 400mm below the top of the lower slab, revealed a layer of made ground and building rubble with no surface archaeological features or deposits visible except some two disturbed wall-lines described below (Figure 4-15).



Figure 4-15
Area Around ATP7-ATP12 Stripped to Formation Level

The walls were laid out in an L-shape with at least three courses of brickwork present. The bricks were of Victorian to early 20th century dimensions (roughly three inches thick) and the wall varied in width from nearly 1m in the north to 200mm in the south-west. Its alignment included a distinctive angle and corresponded closely with buildings of 19th century date mapped shown on the 1880 Ordnance Survey Town Plan (Figure 4-16 to 4-18). The map shows that the thicker wall was a property boundary while the thinner western wall was an internal feature.



Figure 4-16
Area Excavation





Figure 4-17
Brick Wall Facing SW



Figure 4-18
Brick Wall Facing Northwest





4.3 Investigation of the 'Destroyed Caves'

4.3.1 Crane Base Pits

Two surface pits were excavated by contractors to test the ground conditions in within the area required for the crane base construction (Figure 4-19; pictures supplied by Fed3 project managers). These show the roof of the 'destroyed caves' partly breached.

Figure 4-19
Brick wall facing Northwest

Photographs supplied by Fed3 Project Managers



4.3.2 Sub-surface Openings

Two small openings were made in the brick blocking at either end of the 'destroyed caves'. They confirmed that the caves are fully filled with debris; at the north end the cave roof continues a short distance into the filled area before visibility is blocked by fill, on the southern opening only fill is visible.



Figure 4-20
Openings at the Northern (left) and Southern Ends of the 'Destroyed Caves'





4.4 Artefacts

No pre-Victorian artefacts were identified during the fieldwork and none were retained.

4.5 Response from Planning Archaeologist

Regarding the results of excavation of ATP7 to ATP12 and the site strip around these pits to formation level, planning archaeologist stated 5 that:

"if no archaeological features/deposits/structural remains are encountered during the supervised strip, then no further archaeological work is required for the surface."



⁵ Email to SLR Consulting dated 3rd October 2019

This condition was met as the structural remains identified were fully recorded by plan drawing and photography.

He also stated:

"In terms of the 'destroyed' caves, it is good that the crane location is within an area where the cave roof has been breached. As the cave has been filled with granular material there will presumably be little to record but if there are any visible edges of chambers, these should be surveyed."



5.0 Conclusions

The geotechnical and archaeological trial pit records show that there is no significant potential for surface archaeological remains to exist on the Site and to be harmed by the construction of the development. The presence of caves suggests that surface remains would have been present but they appear to have been removed during the various stages of historic site development.

The 'destroyed caves' have been shown to be partially intact but filled with granular material. Their roof has been breached at least in places, including at the location of the crane base.

The construction of the crane base is likely to add to the existing harm to the 'destroyed caves' but no impact to them is anticipated beyond the footprint of the crane base.

The planning archaeologist has asked for a survey to be made of any cave walls which may be exposed within the area of the crane base during its construction. This work will be carried out at the time of construction; there will be no safe access into the hole and measurements, written observations and photographs will be taken from the sides of the hole and the results incorporated into a revised version of this report, in accordance with the project WSI.



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