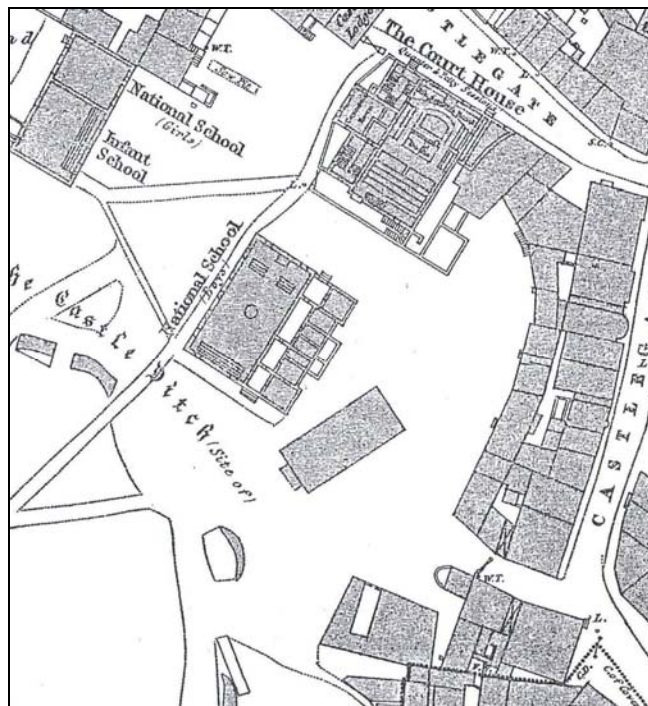


**UNIT 1, CASTLE PRECINCT, KNARESBOROUGH,  
NORTH YORKSHIRE:  
AN ARCHAEOLOGICAL WATCHING BRIEF**



**On behalf of Martinhal LLP**

CS Archaeology  
June 2009

**On behalf of:** Martinhal LLP  
c/o Mr B Graham  
Projex Building Solutions  
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Leeds  
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**National Grid Reference (NGR):** SE 3497 5693

**Project Number:** 54

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**Timing:** Fieldwork March 2010  
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*Frontispiece: plan of the former National (Boys) School c.1848*

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### Appendices

- Appendix 1: The Written Scheme of Investigation
- Appendix 2: Archive Inventory

## 1 SUMMARY

- 1.1 An archaeological watching brief was undertaken at Unit 1 (formerly Knaresborough's National School for Boys), Castle Precinct, Knaresborough, North Yorkshire during the excavation of 30 underpinning foundation trenches. This work has formed the third and final watching brief report on the building's stabilisation work. The work was commissioned by Martinhal LLP to satisfy a condition placed on Scheduled Monument Consent by English Heritage.
- 1.2 Previous archaeological watching briefs have consisted of: the excavation of 2 trial trenches (CS Archaeology, 2008) which did not reach natural bedrock, and 8 boreholes (CS Archaeology, 2009). The boreholes were positive for bedrock and this work has revealed the possible extent and depth of Knaresborough Castle's moat.
- 1.3 Following the excavation of the 30 trenches no deposits were revealed that predated the former school's construction. The trenches revealed a series of limestone supporting walls and an under floor heating system which both date to the buildings construction c. 1814.

## 2 INTRODUCTION

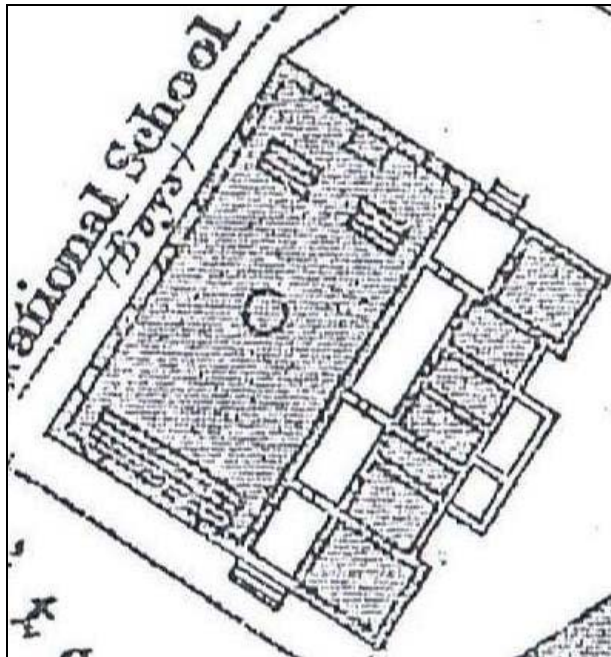
- 2.1 The Proposed Development Area (PDA) unit 1 the former National School lies within the parish of Knaresborough 5 kms north-east of Harrogate (**Figures 1 and 2**). The PDA comprises of a rectangular footprint of the building, 0.13 hectares in extent, and is situated at the north-eastern side of Knaresborough Castle (NGR SE 3497 5693), a Scheduled Monument (No. 34841). As well as being situated within a scheduled monument the PDA lies within the town's Conservation Area and it is a Grade II Listed Building (No. 330752), which is centred on NGR SE 3497 5693.
- 2.2 In October 2008 two test pits were excavated along the southwest wall, reaching a depth in excess of 2 metres each but no evidence of natural geology was encountered. In November 2009, geotechnical boreholes were excavated, all of which encountered solid geology, and allowed a possible reconstruction of Knaresborough's Castle moat. The field work for this report was undertaken in March 2010, and was in response to a condition placed on Scheduled Monument Consent. This condition gives permission to convert the former school into commercial premises after first stabilising the building, ensuring that the former school continues to represent one of Knaresborough's principal historic buildings.

### 3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 The earliest documentary reference to Knaresborough is recorded in the Domesday Book of AD 1086. The place name suggests a defended settlement before the Norman Conquest. Anglo-Saxon Burghs usually had a defensible bank or ditch but there are no surviving records for the construction of a bank or ditch around Knaresborough. Knaresborough Castle dates to the early 12<sup>th</sup> century (CS Archaeology 2008).
- 3.2 The first record of a market to be held at Knaresborough was in 1206. During the 13<sup>th</sup> century there was a strong ironstone industry in the town's hinterland and the town also developed in importance as a woollen centre (*ibid*).
- 3.3 The castle is typical of the medieval period with an impressive tower and walled enclosures or wards with an external moat. Access to the castle was via two gateways which were defended by fortified gatehouses which spanned the moat. Remains of these bridges have been found below present ground level. The castle features two sally ports, which were access tunnels large enough to allow a rider on horseback to pass through. The western side of the castle features a dry moat up to 30m wide. Excavations of the southern section, during the 1930s, revealed that it was at least 3.5m deep. The northern arm of the moat was landscaped in the 19<sup>th</sup> century as part of the creation of a pleasure garden and the eastern arm of the moat was filled in after the castle's partial demolition after the civil war. It was considered that there was a potential for significant remains to survive (*ibid*).
- 3.4 The PDA represents the former National School which has an elaborate scrolled date stone "National School 1814", above the northeast wall. The school was built in the Castle Yard mainly through the efforts of the Vicar, the Reverend Cheap under the official heading of 'National School for the Education of the Poor in the Principles of the Established Church'. The project was financed by public subscription and the Duke of Devonshire contributed £500. In 1833 there were 170 boys in education all under the strictest of discipline (Kellett 2004, 17-18). The girls' school moved from a room adjoining the vicarage to a schoolroom in the Castle Yard. By 1837 there were two schools in the Castle Yard the Castle Boys School and the Castle Girls School. In 1823 Charles Marshall left the sum of £500 to the school. Part of the interest was to be used to buy clothing for the two boys and two girls with the best scholastic record. The fees charged to the parents was one shilling a quarter. In 1838 the first government grant of 135 pounds was paid to the school (Jennings 1970, 380).
- 3.5 The headmasters at the school were known as Gaffers (Kellett 2004, 17-18), however trade directories record the official titles as master and mistress. The first recorded master was William Waterous (Baines 1822), then James Jackson was the master of "National School (Boys)" (Pigot 1828). Jackson was replaced by William Blanchard (Pigot 1834) and James Marshall (Pigot 1847) who in 1848 was joined by two mistresses Mary Jacques and Ann Sparnell (Slaters).
- 3.6 By the 1930s the school educated junior children and in 1971 the school was amalgamated with the Girls School, and moved to Knaresborough County

Secondary School, on Stockwell Road (Kellett 2004, 17-18). During World War II, Castle Yard was used as an official meeting place and historic photographs of the school's northwest elevation provided a backdrop to a public subscription, towards the warship, HMS Wallflower (Kellett 2003: [Plate 12](#)).

- 3.7 The building is constructed of well coursed sandy limestone under a hipped slate roof with three apparent extensions to the south-east elevation. These extensions feature two remodelled gabled roofs and a central hipped roof. Originally these extensions were thought to be complete later additions. Examination of the school's plan of 1849 (see below: [Figure 3](#)), shows the school was originally divided into three single storey elements. The plan features a large main room, and a linked series of yards that separated a range of seven rooms along the southeast side of the school. Therefore the later extensions represent a remodelling of the original building that resulted in the central yards being roofed over.



Extract from the 1849 Ordnance Survey Plan ([Figure 3](#))

- 3.8 The larger northwest section of the school represented a large open classroom. Three sections of seating are depicted with a circular feature at the centre of the room. The function of the central circular feature is unknown; no allowance for it could be discerned in the exposed roof structure, fully visible during the watching brief, so it probably represented a ground floor feature, possibly a lectern/platform. The southeast section comprised of a range of 7 smaller rooms, each presumably accessed from the linked central yards. The function of the ancillary rooms is unknown but at least one would appear to have served as the furnace or stoke house (see section 6 below), coal stores, stores or even offices. There was a total of two original entrances, these were at either end of the linked yards and featured external staircases protruding from the northeast and southwest elevations. There is a blocked doorway to the centre of the northeast elevation, which was in use during the war and is depicted in a historic photograph (Kellett 2003), but no such doorway is evident in the 1849 plan.

- 3.9 Redevelopment of the building, probably during the later 19<sup>th</sup> century, resulted in the incorporation of the open yards by construction of three gabled and hipped roofs, which are still extant. The internal walls of the southeast range, are no longer extant and were probably removed during the redevelopment of the southeast range during the Victorian period. The outer walls may still be in situ, and are denoted by a continuation of the external stonework and plinth which represents the present boundary wall of the property.
- 3.10 Just how the original school was heated has never been investigated, the present work has not been subject to an archaeological building record. No evidence for chimneys, vertical flues or ducts or even fireplaces was found, despite the internal walls being stripped back to the original plaster. Evidence for under floor heating systems is rare but was taking place in high status buildings and factories. During the early 18<sup>th</sup> century heating systems were used in factories and later used in high status domestic contexts. This involved a cockle (a finned metal stove) over which fresh air was ducted and then carried around the building by convection and entering the rooms directly through vents. These were first used in factories in the late 18<sup>th</sup> century and then transferred as a technology into the domestic context in the early 19<sup>th</sup> century by people like Matthew Robinson Boulton who installed such a system in Soho House in Birmingham in 1809 (pers. comm. Mr N Molyneux, English Heritage: Internet Source 1). In Derbyshire Belper North Mill featured a ducted air system and was built in 1805 and subsequently one was built in the Derbyshire Royal Infirmary (now gone) and probably in a domestic context at St Helen's House in Derby (pers. comm.. Mr S Baker, Derbyshire County Council). No evidence for internal room vents was revealed during the course of the watching brief. External air vents were in situ but these appeared to have been later insertions. To date the author knows of no parallels within Yorkshire for under floor heating systems. There are examples in America, the Governor of Maryland had a wide hypocaust built in the orangery of Calvert House and dates to the 1720s (pers. comm. Mr J Ayton, English Heritage).



#### 4. AIMS AND OBJECTIVES

- 4.1 The objective of the archaeological watching brief is to gather sufficient information to establish presence/absence, character, extent, state of preservation and date of any archaeological deposits resulting from the excavation of the foundation trenches.

#### 5. METHODOLOGY

- 5.1 This has been carried out in accordance with a Written Scheme of Investigation approved by English Heritage (Mr. K. Emerick) in 2008 for the trial trenching works (Appendix 1) and was fully adhered to for this watching brief.
- 5.2 The previous watching brief (CS Archaeology 2008) recorded what was then thought to be the upper moat fills onto which the former school had been constructed in 1814. In hindsight these deposits proved to be entirely re-deposited levelling fills which post-date 1814 (date of the school's construction). Written records of the contexts were made on survey recording sheets and have been summarised in Appendix 2.
- 5.3 A photographic record was made of the excavations with black and white silver based film using a 35mm single lens reflex camera and this forms part of the site archive. Digital photographs were also taken to illustrate the report and supplement the archive. Photographic position numbers have been used to cross reference photographs in the report and archive, these are denoted in italics e.g. **Plate 1**, 34.
- 5.4 The datum level of the internal floor from previous the watching briefs, was re-used for this report.
- 5.5 The watching brief consisted of the monitoring of a series of 30 trenches that straddled the building's outer walls (**Figure 4**). These trenches have been subdivided e.g. Trench 1a (internal) and 1b (external). Because of the redeposited nature of the excavated material environmental sampling would be of limited potential, consisting of flue residues and levelling back fill, and was therefore not undertaken.
- 5.6 Dr. K. Emerick of English Heritage and Ms. L. Hawkins of North Yorkshire County Council were kept informed of progress and of the results during the archaeological works.

## 6. RESULTS

- 6.1 These have been largely negative for any deposits earlier than the 19<sup>th</sup> century, apart from occasional finds of re-deposited medieval pottery sherds contained within the levelling fills of the former school building. Trench results have been summarised in Appendix 2. All artefacts have been retained and will be included in the site archive.
- 6.2 Details of the school's construction were revealed. These included a series of limestone walls and an elaborate brick duct which ran beneath the main room. Both of these features are contemporary with the building and therefore date to around 1814. The limestone walls probably supported the original flagstone floor which is no longer extant. In doorway B (**Figure 6**) is an *in situ* flagstone fragment from the original floor which survived after being wedged beneath an infill wall. In addition evidence for the school's original heating system was also re-discovered below floor level. The heating system comprised of brick duct with internal brick baffles.
- 6.3 As the trenches were excavated a series of limestone walls [123], 0.5m wide, were revealed. In plan (**Figure 7; Plate 1, 34**) it was revealed that there were at least two consecutive walls at an interval of c.0.9m. These extended down to 1.2m below the present floor level, with the bottom of the trenches a further 0.6m (**Plate 2, 2**). All the excavated deposits, throughout the building were of a 19<sup>th</sup> century date, and included clay pipe stem fragments, stoneware and transfer decorated pottery and these can be characterised as levelling deposits for the 'new' school building.
- 6.4 The limestone walls did not extend into the south-western end of the PDA. This was probably because they had been removed during the course of previous stabilising operations. These 0.5m wide limestone walls [123] mirror the existing building walls [122] and represent reduced offsets in plan **Figure 7**. Both walls are of roughly faced limestone and of a similar construction. These internal walls were not found *in situ* during the course of the 2008 test pits excavations, although limestone blocks were noted in the spoil. It is likely that this area was subject to historical disturbance.
- 6.5 The northwest trenches (**Plate 3, 3**) were excavated first. These confirmed the nature and extent of the limestone support walls [123]. As each new trench was excavated, a pattern emerged of two walls running through the trenches. The first wall abutted the main building wall with a further inner wall set at a 2m interval. As work moved along the northeast wall the same pattern continued until in the centre trench, 3b a brick structure was encountered at its southwest end (**Plate 4, 16**) and in plan it featured a bend towards the southeast wall. Initially the brick duct [108] was thought to represent a relict section of drain which predated the school (1814). The brick duct [108] was also revealed in Trench 2b, bisecting its southwest end at 90°.
- 6.6 However the drain theory was at odds with the evidence since the floor supporting walls [123] were found to respect the heating ducts, the inner wall butt ended just short of the duct in trench 3b. The outer wall [123] continued without interruption. The brick duct [108] was also revealed in Trench 1b, respecting the original

Doorway A (**Plate 5**, 37) suggesting the duct and doorway were contemporary. Therefore an alternative function of this feature was required in order to meet the developing evidence for the watching brief. Doorways A and B are depicted in the Ordnance Survey plan of 1849 (**Figure 3**) and denote two external doorways into the main school room. Doorway A provided a suitable opportunity to record a cross section through the brick duct (**Figure 5: Plates 6 and 7**, 38 and 40). Doorway A represented an unusually high opening of 2.8m (width 1m). This tall design is unusual and can only be explained by allowing enough room for the brick duct [108] to be fitted below floor level. The brick duct [108] was constructed by an initial levelling bed of crushed limestone [107] onto which a 0.78m wide flagstone [106] was laid. On top of the flagstone, brick and lime mortared walls had been built either side of a central 0.5m wide aperture. This aperture was in turn reduced, by vertically set bricks, to create a narrower 0.21m wide central duct. This central duct had a corresponding linear hollow to the flagstone beneath and evidences that the structure was still largely in situ. The central duct was partially filled with dark brown sandy silt [105] reminiscent of chimney soot. The red bricks (0.225m x 0.066m x 0.113m) were poorly ground with characteristic lower linear scars were they were lifted when the clay was still wet and probably positioned within a kiln. A small percentage (c.2%) of these bricks were sub-standard, over-fired bricks (**Plate 8**, 98) which actually proved resilient to the temperature fluctuations of the heating system.

- 6.7 As evidenced by the internal soot deposits the brick duct [108] was built to channel heated air. The purpose of these vertically set walls was probably to act as a heat baffle which would originally have indirectly heated the two flanking ducts allowing the adjacent brick supporting walls to act as a heat sink and also to dissipate the intense heat of the main duct preventing rapid temperature fluctuations and preserving the integrity of the system.
- 6.8 Along the southeast trenches, no further evidence of the brick ducts were encountered until trench 20b was opened up in front of Doorway B (**Figure 6**). Doorway B was plastered but had been reduced in width from 1.4m to 1.2m (**Plate 9**, 42). The original width was evidenced by the vertical building line to the plastered southeast wall [122]. Oak inserts were built into the walls to fix the original door casing, one of these was still in situ. The lower doorway featured a similar brick and flagstone structure to Doorway A. Differences between the ducts (between doorways A & B) were noted. These consisted of a slightly wider overall structure and two lower ducts in Doorway B, separated from the upper duct by a substantial horizontal flagstone (**Plates 10 and 11**, 32 and 31). The lower flagstone was 0.88m wide x 0.04m thick and was built into the brick structure and acted as a cover for the two lower ducts. The lower ducts measured 0.2m<sup>2</sup>. The two lower ducts appear to have been run at lower temperatures, as there was an absence of heat discolouration but the ducts were partially filled by a fine soot like deposit and there was also soot staining to the upper limestone blocks [122].
- 6.9 The upper duct was very similar to Doorway A. with vertically set bricks presumably originally bonded with lime mortar although the lime had been heavily eroded. These inner brick linings defined the central duct from the flanking voids which had been filled with fine deposits [116 and 117] which like doorway A was 0.2m wide. The upper duct had been subject to intense heat as evidenced by the

reddened discolouration to the upper surface of the lower flagstone. Sediments had filled the upper duct suggesting that it had silted up as a result of the heating operation and erosion of the brick and lime mortared walls. The primary fill [115] of the upper duct was an ash like deposit. The duct had then been levelled by the introduction of a series of levelling deposits [111-114], and a modern 20<sup>th</sup> century solid concrete floor [110] capped these deposits. Evidence for the original floor was provided by a short fragment of in situ horizontally set flagstone on a bed of lime mortar. A notable piece of evidence for the original floor came from an in situ piece of horizontal flagstone still bedded onto its mortar support. Further flagstone fragments, probably from the original floor, were identified within the levelling fill [111].

- 6.10 Just how long the original heating system had been in operation is unknown. Evidence for the subsequent heating system was revealed in the form of cast iron pipes. The pipes had been channelled into the concrete floor [110] and were therefore associated with the later modern floor, (deposits [102, 111 and 109]), which dates to the late 20<sup>th</sup> century. During the course of the watching brief the cast iron pipes from the replacement heating system were traced along the southeast side of the southeast wall.

## 7. CONCLUSIONS

- 7.1 The principle result of the watching brief was that no deposits earlier than 1814 were encountered even to the excavated depth of 1.8m below the present floor level (78.05m AOD) required for the new foundations. During the previous watching briefs (CS Archaeology 2008 and 2009) it was thought that the upper layers of the castle moat had been encountered as evidenced by the medieval pottery. However the more comprehensive investigations associated with the foundations across the majority of the building has confirmed that these 'medieval' contexts were in fact re-deposited 19<sup>th</sup> century deposits.
- 7.2 The discovery of an original heating system beneath the floor of the original school is of particular significance. Close examination of the building's walls and roof confirmed the absence of any flues or chimney scars so to find evidence of a hypocaust was a surprising but logical result.
- 7.3 Although only sections of the heating system were revealed high heat levels were found to have affected the duct of Doorway B indicating that the likely heat source would have lain to the south east of Doorway B (outside the area of the watching brief). Doorway B consisted of three ducts, the upper of which was found to have been associated with intense heat. Evidence from the two lower ducts indicated that they either served as horizontal chimney flues or, as seems more likely, they were devised merely to raise the upper duct to a required operating level so the flow of heat through the building could be achieved. The narrow dimensions and lack of apparent maintenance access to the lower ducts suggests that the latter scenario is more likely. Doorway A consisted of a single duct without evidence for intense heat. This indicates that the heating system entered the main building through Doorway B and then turned right along the centre of the building before doing another right turn and exiting through Doorway A.
- 7.4 The school's heating system relied on flue gases heating the room by radiant heat through the floors in the form of a true hypocaust system. The evidence outlined in this report provides a tantalising glimpse of just how an institutional building was heated. The former Boys' school therefore represents a notable example of a hypocaust system, possibly the first in Yorkshire since the Romano-British period.

## 8. REFERENCES

### 8.1 Bibliography

Baines's Yorkshire (Trade Directory) 1822

CS Archaeology, 2008, *Units 1 and 2 Castle Precinct, Knaresborough, North Yorkshire: An Archaeological Watching Brief*, unpublished report.

CS Archaeology, 2009, *Unit 1 Castle Precinct, Knaresborough, North Yorkshire: An Archaeological Watching Brief*, unpublished report.

Jennings B., 1970, *A History of Harrogate & Knaresborough*, Huddersfield

Kellet A., 2003, *Images of England, Knaresborough*, Stroud.

Kellet, A., 2004, *An A-Z of Knaresborough History*, Otley.

Knaresborough Civic Society, 1973-1976, *A Survey with Photographs, Vol. II* unpublished.

Le Patourel J., 1966, *Knaresborough Castle*, YAJ Vo. 41, 391-607.

Pigot's Directory of Yorkshire 1828-9, 1834 & 1847.

The Post Office Directory of the West Riding, 1861.

Slater's Directory of the Northern Counties, 1848 & 1854.

### 8.2 Cartographic References

1849, Ordnance Survey Map (reproduced in Patourel 1966)

1909, 25 inch Ordnance Survey Map

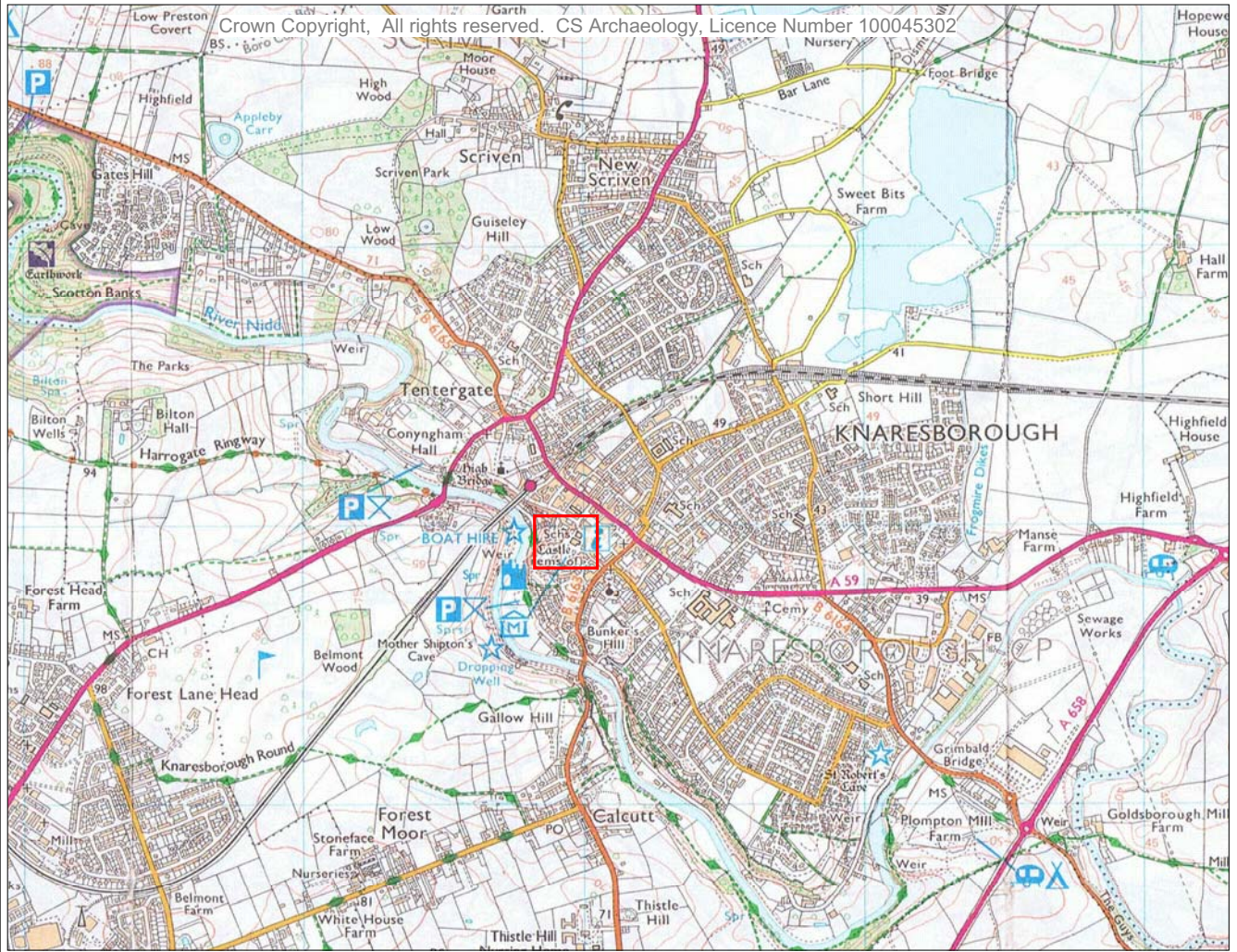
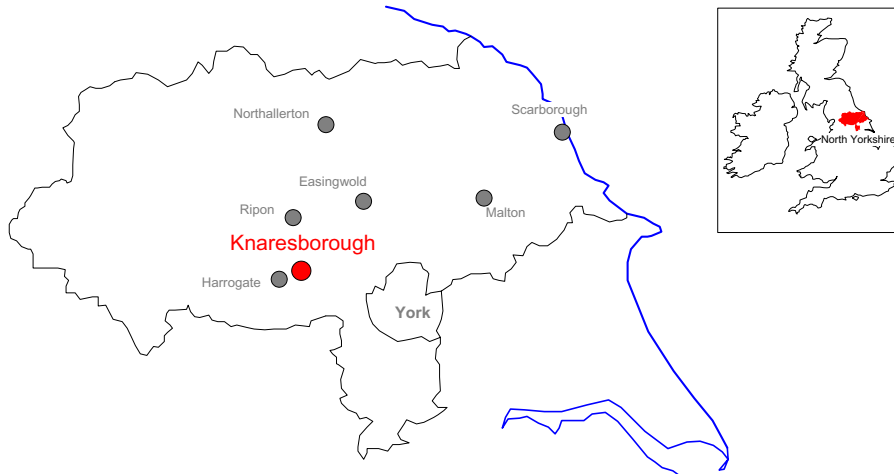
### 8.3 Internet Sources

1. <http://www.bsos.umd.edu/anth/aia/Calvert%20House.htm>

## 9. ACKNOWLEDGEMENTS

Thank you to Martinhal LLP for commissioning this report and to Mr. B. Graham of Projex Building Solutions for facilitating the archaeological work. Grateful thanks to Mr. K. Emerick, English Heritage and Mr. S. Baker, Derbyshire County Council for providing a context for the results.

# FIGURES



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for inset see Figure 2



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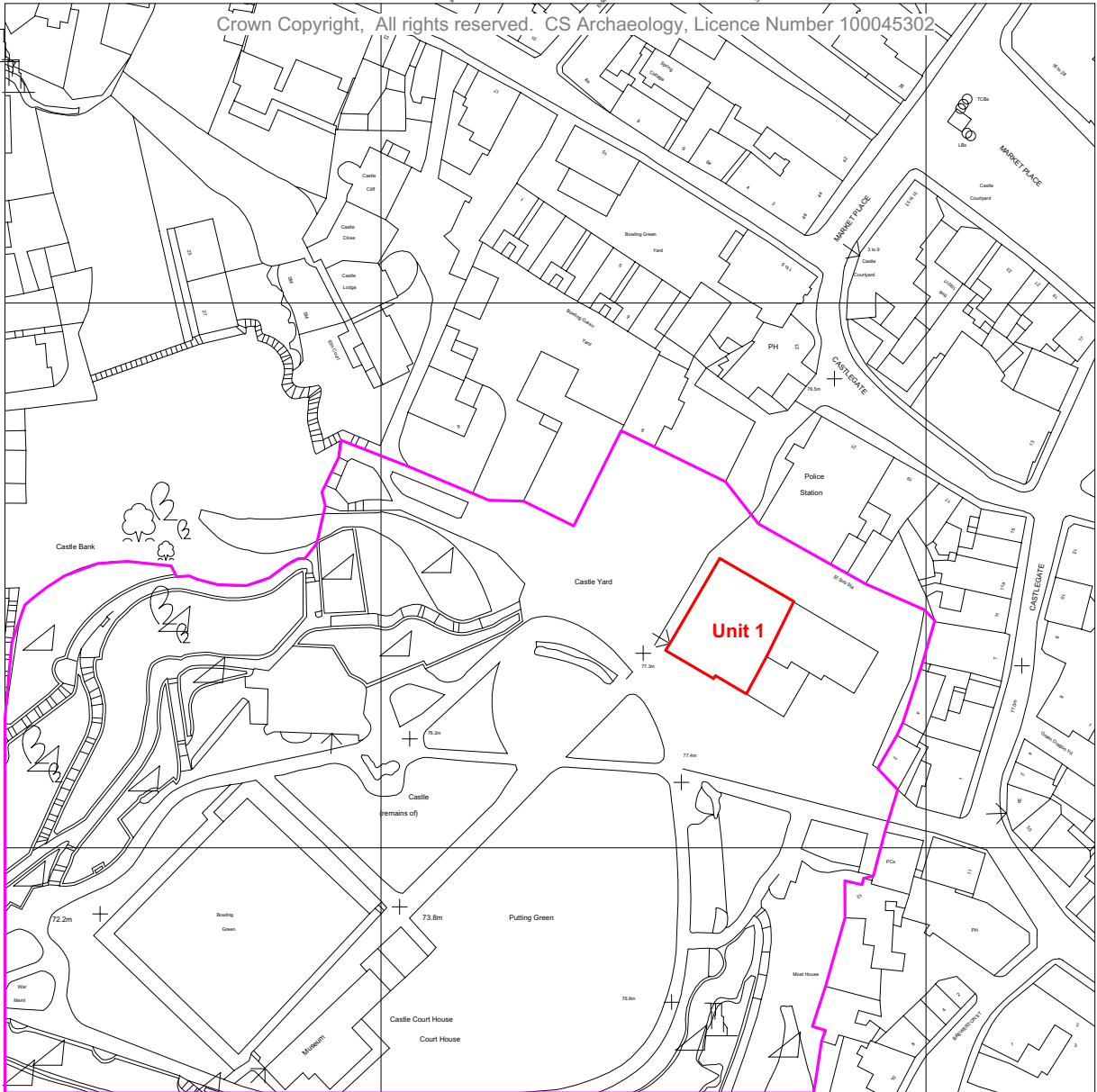
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31m

4 570

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4 348

4 350



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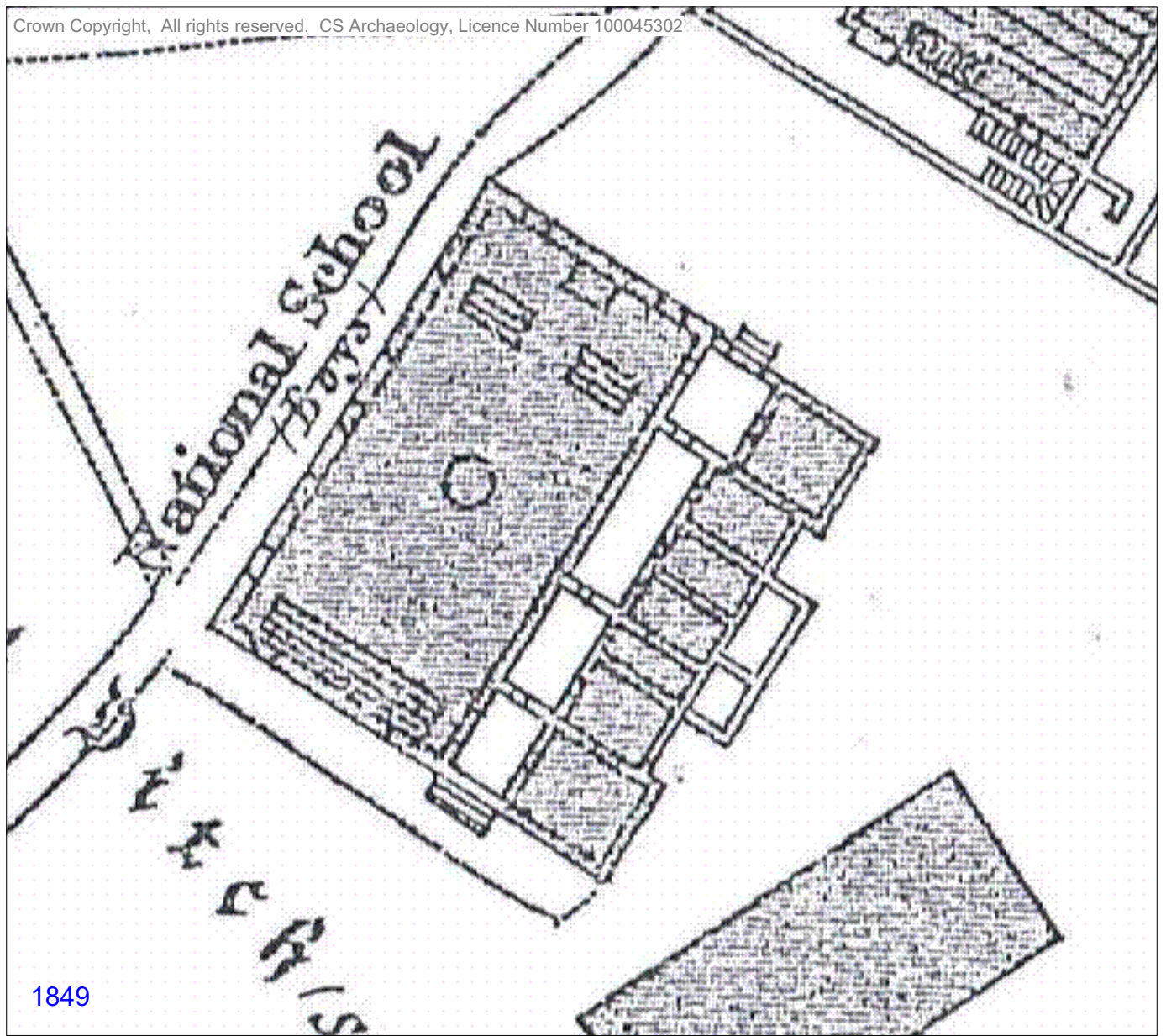
 Scheduled Monument Boundary

 Proposed Development Area (PDA)

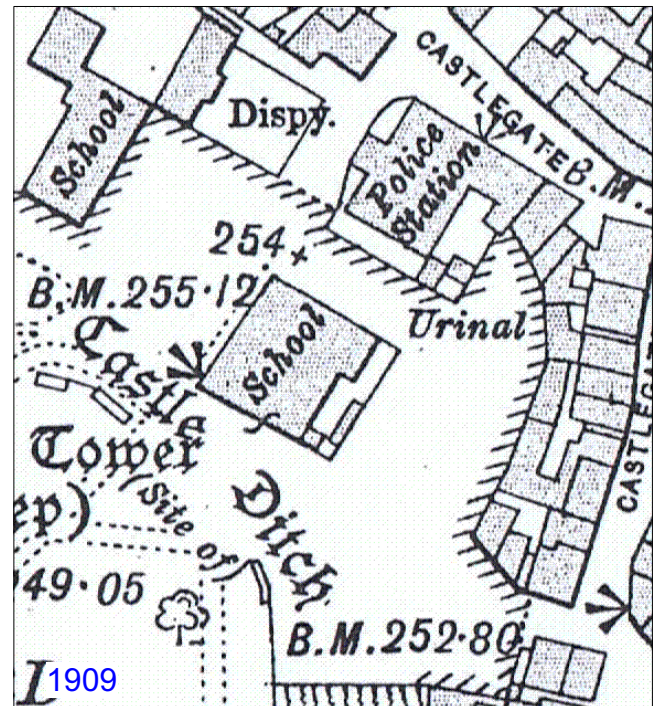
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Watching Brief

Figure 2: Location Map  
of the PDA

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June 2010



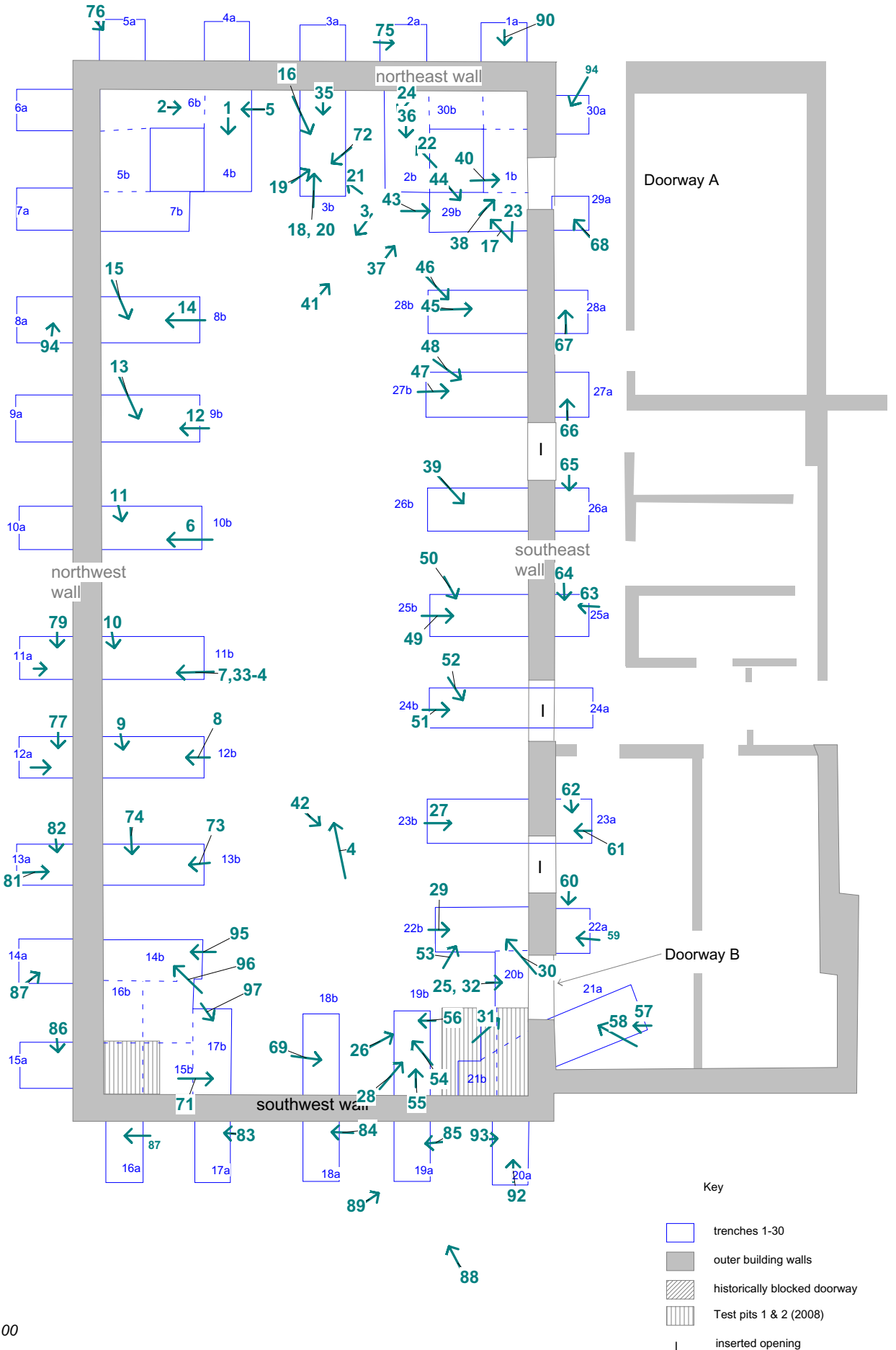
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1909



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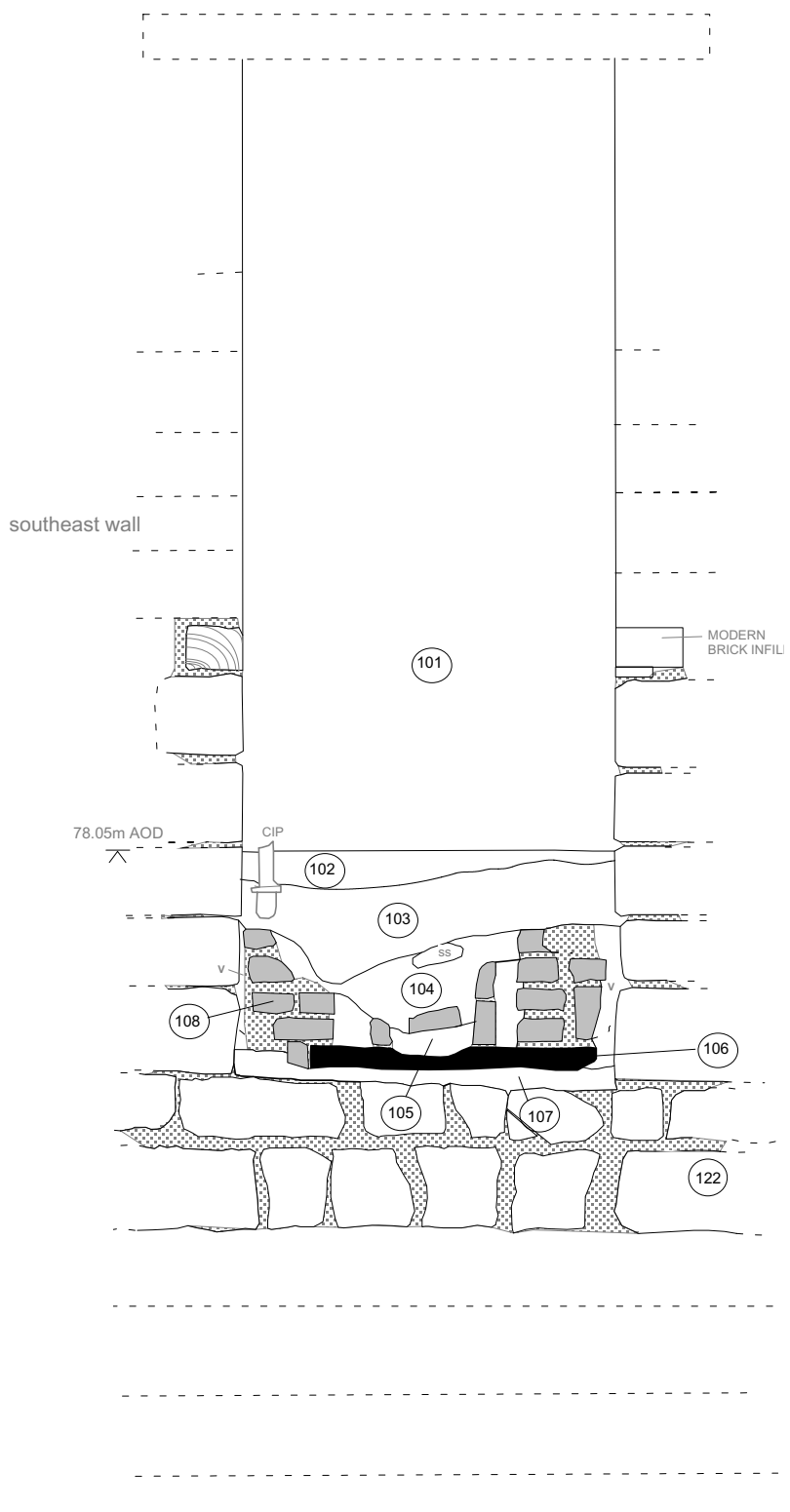


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


Unit 1 Castle Precinct,  
Knaresborough: An Archaeological  
Watching Brief

Figure 4: The PDA with  
Trench and Photographic  
Locations

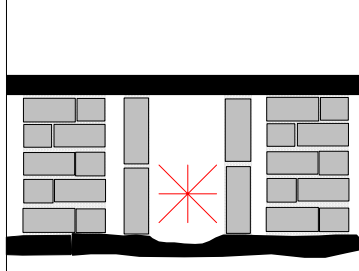
CS Archaeology  
June 2010

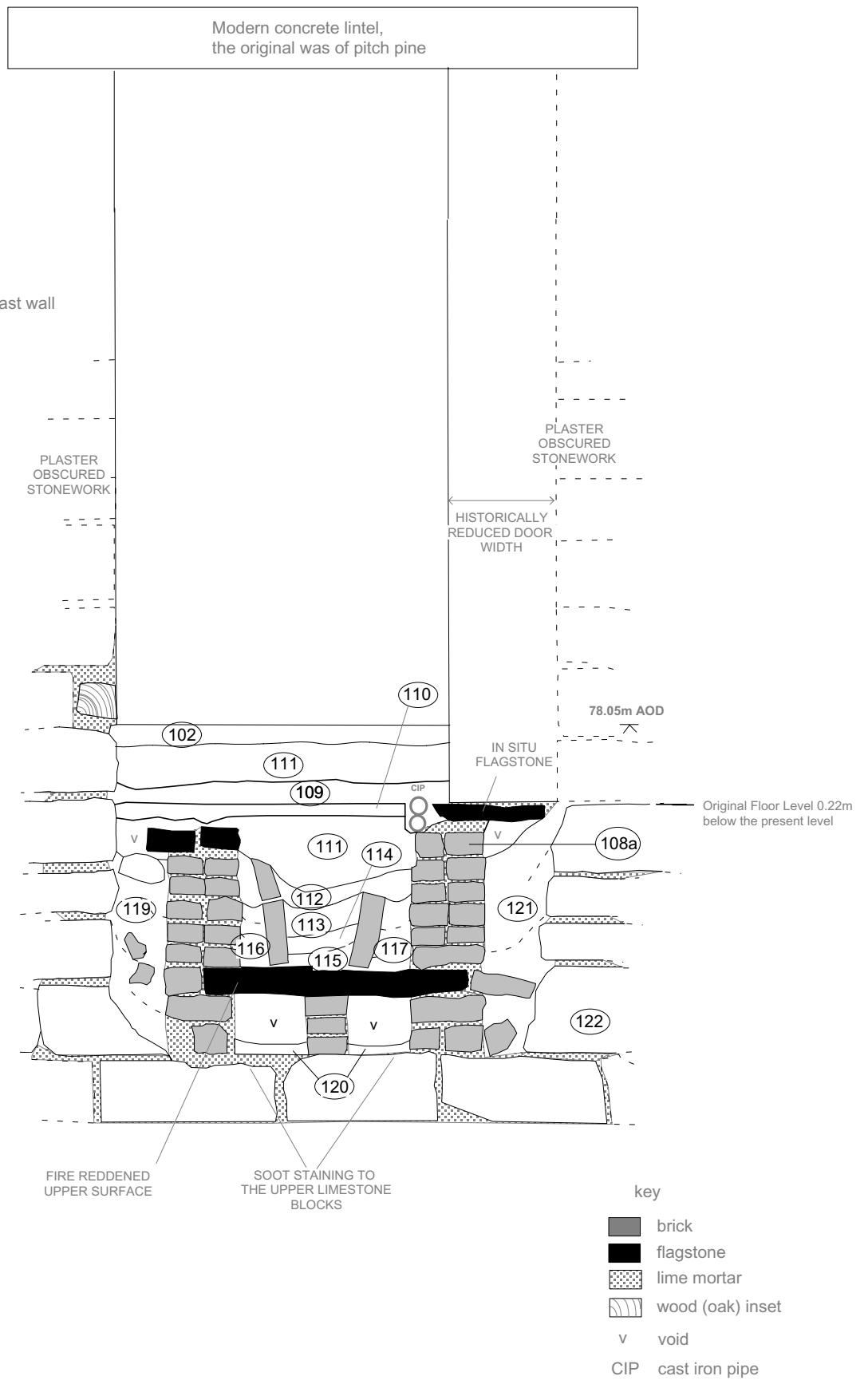


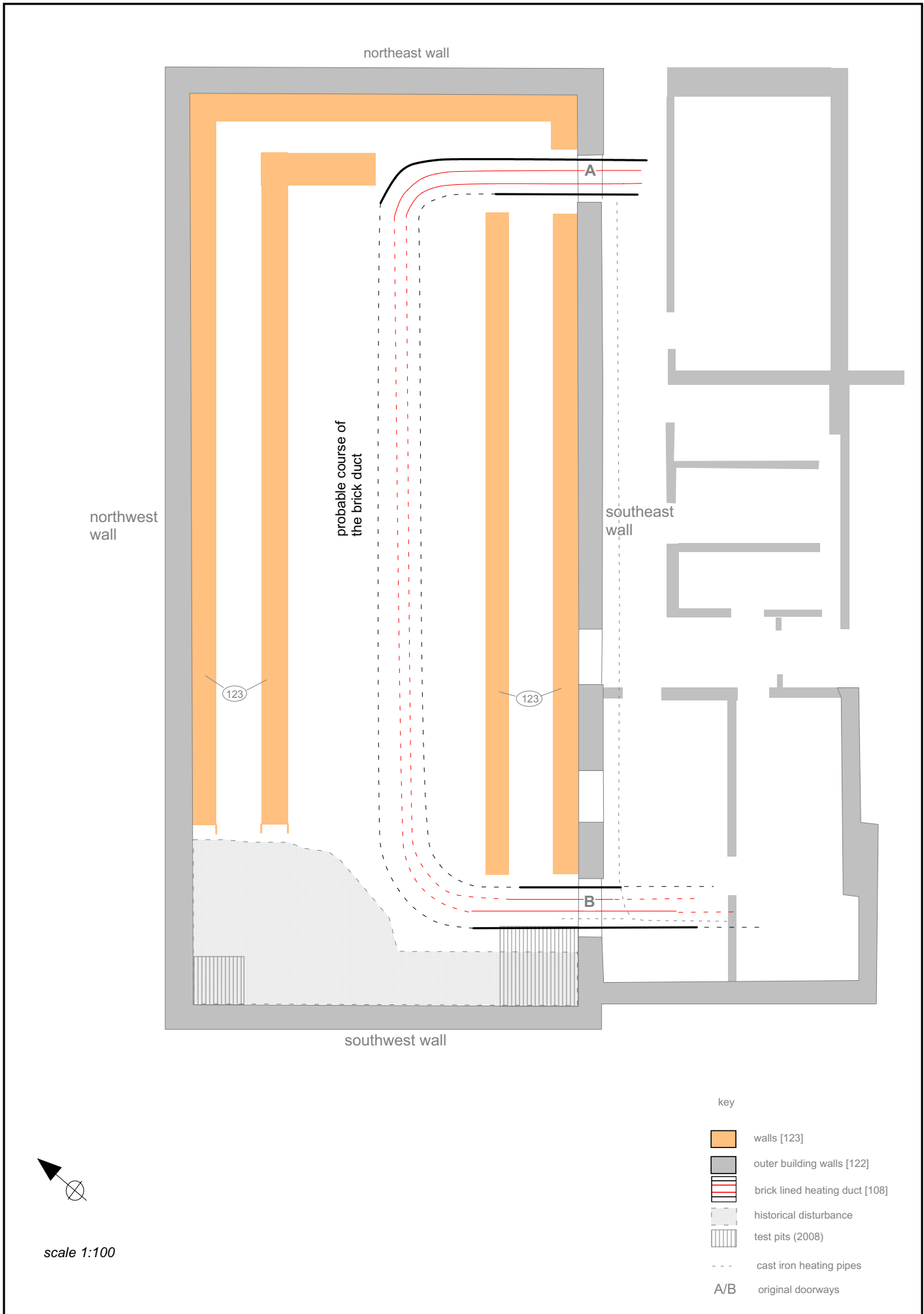
key

-  brick
-  flagstone
-  lime mortar
-  wood (oak) inset used to nail original door casing
- v void
- ss sandstone
- CIP cast iron pipe
- \* heated air
- - - Limit of Excavation

Reconstruction







# PLATES



**Plate 1, 34:** Trench 11b, general view with the pair of limestone walls [123] just becoming visible, from the northwest



**Plate 2, 2:** Trench 4b, NW facing section, showing the levelling sequence, with a section through the outer (left) limestone wall [123], and the face of the inner (right) wall [123], from the northwest





**Plate 3, 3:** general view of the excavated trenches along the northwest wall, from the northeast



**Plate 4, 16:** trench 3b, the northern edge of a brick duct [108], from the north



**Plate 5, 37:** trench 1b, Doorway A with the brick duct [108], from the northwest



**Plate 6, 38:** trench 1b, Doorway A with a detailed (oblique) view (0.2m scale) of the brick duct [108] with partially collapsed baffle and soot stained moulded flagstone, from the northwest



**Plate 7, 40:** trench 1b, Doorway A with a detailed (oblique) view (0.2m scale) of the brick duct [108] with partially collapsed baffle and soot stained moulded flagstone, from the northwest



**Plate 8, 98:** detail of bricks used in the duct [108] with lime mortar and soot still adhering



**Plate 9, 42:** general view of the southeast corner of the PDA with Doorway B, from the northwest



**Plate 10, 32:** trench 20b, detail of the brick duct [108a] below doorway B, from the northwest



**Plate 11, 31:** trench 20b, oblique view of the brick duct [108a] below Doorway B, from the west



**Plate 12:** view of the northwest elevation in 1942 during the fund raising for H.M.S. *Wallflower*, from the west

# APPENDIX 1: WSI

**UNITS 1 AND 2 CASTLE PRECINCT,  
KNARESBOROUGH, NORTH YORKSHIRE:  
A WRITTEN SCHEME OF INVESTIGATION FOR  
AN ARCHAEOLOGICAL WATCHING BRIEF**

**CS Archaeology**

**September 2008**

0 SUMMARY

- 0.1 This Written Scheme of Investigation (WSI) is in response to a condition placed on Scheduled Monument Consent by English Heritage (2/7/2008: Monument No. 34841) which permits development to proceed subject to an approved written scheme of investigation, which has to be agreed in advance before any works can take place.
- 0.2 This condition has been imposed because the Proposed Development Area (PDA) is situated within a Scheduled Monument could impact on archaeological deposits of national significance.
- 0.3 This WSI proposes that an archaeological watching brief is implemented to ascertain the nature of the archaeological resource which may be encountered during the site works.
- 0.4 The results from these archaeological works will provide a more detailed assessment of the PDAs archaeological resource.



## 1 INTRODUCTION

### 1.1 Details

1.1.1 *Site Name:* Units 1 and 2

1.1.2 *Location:* Castle Precinct, Knaresborough, North Yorkshire.

1.1.3 *Status:* Scheduled Monument (No. 34841)

1.1.4 *Grid reference:* SE 3494 5696

1.1.5 *Area of site (hectares):* c.0.00055

1.1.6 *Purpose of the work:* to record the archaeological resource. This record will establish the presence/absence, character, extent, state of preservation and date of any archaeological deposits within the PDA in the areas outlined in **Figures 1 and 2**, and if suitable, samples will be collected for palaeoenvironmental research.

## **1.2 Archaeological Background**

- 1.2.1 The earliest documentary reference to Knaresborough is recorded in the Domesday Book of AD 1086. The place name, suggests a defended settlement prior to the Norman Conquest. Anglo-Saxon Burghs usually had a defensible bank or ditch but there are no surviving records for the construction of a bank or ditch around Knaresborough. Knaresborough Castle dates to the early 12<sup>th</sup> century.
- 1.2.2 During the Medieval period the town's residents shared communal responsibilities and were known burgesses and burgesses were recorded in the town in 1169. The first record of a market to be held at Knaresborough was in 1206. During the 13<sup>th</sup> century the ironstone industry developed in the town's hinterland and the town developed in importance as a woollen centre (NYCCHS 2005, 2).
- 1.2.3 The Castle is typical of the medieval period with an impressive tower with walled enclosures or wards with an external moat. Access to the Castle was via two gateways which were defended by fortified gatehouses and spanned the moat. Remains of these bridges have been found below present ground level. The castle features two sally ports, which were large access tunnels and were large enough to allow a rider on horse back to pass through. The western side of the Castle features dry moat, this was up to 30m wide and excavations during the 1930s, of the southern section, revealed that it was at least 3.5m deep. The northern arm of the moat was landscaped in the 19<sup>th</sup> century as part of the creation of a pleasure garden and the eastern arm of the moat was filled in after the demolition of the castle after the civil war. It is considered that significant remains within the moat will survive (English Heritage 2002)
- 1.2.4 The PDA represents the a former School and is depicted on the second edition 6" Ordnance Survey Map of 1892. The stone building is characterised by a hipped slate roof and gabled extension which feature large multi-light windows.

## **1.3 Planning Background**

- 1.3.1 This WSI represents a summary of the broad archaeological requirements to both mitigate and enable an assessment of the impact of development proposal on the archaeological resource of the PDA. This is in accordance with local plan policies and the national Planning Policy Guidance, Note 16 on Archaeology and the Planning, 1990. The PDA lies within Knaresborough Castles's Scheduled Monument Area (Number 34814) and this WSI has been written in response to a condition placed Scheduled Monument Consent by English Heritage.
- 1.3.2 This archaeological condition on consent is to prepare this WSI which covers the removing and study of any matters of archaeological/historic importance observed during the watching brief. The watching brief will apply to all below ground works, namely the excavation of test pits and installation of underpinning to stabilise subsidence problems.

## 2 OBJECTIVES

- 2.1 The objectives of this programme of archaeological work is to gather sufficient information to establish presence/absence, character, extent, state of preservation and date of any archaeological deposits.

## 3 METHODOLOGY

### 3.1 Watching Brief

- 3.1.1 It is proposed to carry out a watching brief of the site strip and foundation excavation operations.
- 3.1.2 This project will be undertaken in a manner consistent with the guidance of MAP2 (English Heritage 1991) and professional standards and guidance (IFA, 2001).
- 3.1.3 CS Archaeology will ensure that services are located prior to excavation by means of site plans.
- 3.1.4 The overburden such as turf, topsoil, made ground, rubble or other superficial fill materials will be removed by hand and or mini digger using a toothless/ditching bucket. Mechanical excavation will be used extremely judiciously, under constant archaeological supervision down to the required depth.
- 3.1.5 The removed material will be scanned using a metal detector under archaeological supervision ensuring that all metal finds are located, identified, and conserved. All metal detection should be carried out following the Treasure Act 1996 Code of Practice.
- 3.1.6 Should any human remains be revealed these will be initially left *in situ*. The coroner's office will be informed only if the remains appear to have been buried for less than 50 years. If the remains prove to be archaeological and have to be removed, a licence will be obtained from the Ministry of Justice and relevant regulations.
- 3.1.7 It is not anticipated that the natural geology will be truncated however should this arise the Watching Brief will ensure that any archaeological deposits will be fully recorded. All deposits will be fully recorded on standard context sheets, photographs and conventionally-scaled plans and sections. All features will be planned at 1:20, with individual features being planned at 1:10 where additional detail is required. All feature sections sampled will be drawn at 1:10 or 1:20 depending on the size of the feature. The elevation of the underlying natural where encountered will also be recorded. Even if no archaeology is recorded the stratigraphy will be recorded. The limits of excavation will be shown in all plans and sections, including where these limits are coterminous with context boundaries.
- 3.1.8 The watching brief will favour preservation in situ, unless features will be directly affected by on-site works. If features are to be affected all anthropomorphic features will be investigated –

discrete features will initially be half-sectioned; linear features will be excavated to 20% of their extent, not less than 1m in extent. Archaeological contexts at junctions or interruptions in linear features will be sufficiently excavated for the relationship between components to be established.

- 3.1.9 All finds that are 'treasure' will be reported to the coroner in accordance with the Treasure Act Code of Practice (1997).
- 3.1.10 Attention will be paid to artefact retrieval and conservation, ancient technology, dating of deposits and the assessment of potential for the scientific analysis of soil, sediments, biological remains, ceramics and stone.
- 3.1.11 All artefacts and ecofacts visible during the excavations will be collected and processed, unless variations to this are agreed by the archaeological monitor (EH/NYCC). In some cases sampling may be most appropriate.
- 3.1.12 Finds will be appropriately packaged and stored under optimum conditions, as detailed in First Aid for finds (Watkins and Neal, 1998). In accordance with the procedures of MAP2 (English Heritage 1991), all iron objects, a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy should be X-radiographed before assessment. Where there is evidence for industrial activity, large technological residues should be collated by hand, with separate samples collected for micro-slugs. In these instances, the guidance of Bayley *et al* (2001) will be followed.

## 3.2 Sampling Strategy

- 3.2.1 If the archaeological deposits are of sufficient interest Environmental sampling may be recommended. Different sampling strategies will be employed according to established research targets and the perceived importance of the deposits under investigation. CS Archaeology conventionally recovers three main categories of sample:
  - i*) Routine Soil Samples; a representative 500g sample from every excavated soil context on site. This sample is used in the characterisation of the sediment, potentially through pollen analysis, particle size analysis, pH analysis, phosphate analysis and loss-on-ignition;
  - ii*) Standard Bulk Samples; a representative 30-40 litre sample from every excavated soil context on site, in accordance with English Heritage Guidelines (2002). This sample is used, through floatation sieving, to recover a sub-sample of charred macroplant material, faunal remains and artefacts;
  - iii*) Purposive or Special Samples; a sample from a sediment which is determined, in field, to either have the potential for dating (wood charcoal for radiocarbon dating or in situ hearths for magnetic susceptibility dating) or for the recovery of enhanced palaeo-environmental information (waterlogged sediments, peat columns, etc).
- 3.2.2 Samples will be taken for scientific dating, principally radiocarbon (C14) and archaeomagnetic dating, where dating of artefacts is insecure and where dating is a significant issue for the development of subsequent mitigation strategies.

- 3.2.3 Environmental samples will be collected from primary and secondary contexts, where applicable, from a range of representative features, including pit and ditch fills, postholes, floor deposits, ring gullies and other negative features. Positive features should also be sampled. Sampling will also be considered for those features where dating by other methods (e.g. pottery and artefacts) is uncertain. Animal bones will be hand collected, and from bulk samples collected from contexts containing a high density of bones.
- 3.2.4 Standard Bulk Samples of 40-60 litres or more will be recovered from every archaeologically significant soil context as part of a comprehensive environmental sampling strategy.
- 3.2.5 Within each significant archaeological horizon a minimum number of features required to meet the aims of the project will be hand excavated. Pits and postholes normally will be sampled by half-sectioning although some features may require complete excavation. Linear features will be sectioned as appropriate. No deposits will be entirely removed unless this is unavoidable. As the objective is to define remains it will not necessarily be the intention to fully excavate all trenches to natural stratigraphy. However, the full depth of archaeological deposits across the entire site will be assessed. Even in the case where no remains have been located the stratigraphy will be recorded.
- 3.2.6 Any excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation in situ.

### **3.3 Photography**

- 3.3.1 A general and detailed photographic record of the excavations and site reduction will be made.
- 3.3.2 General and detailed photographs will be taken with a 35mm camera. All photographs will be in black and white using an appropriate silver based film (Ilford 400 Delta), this will form the primary photographic record.
- 3.3.3 This record will be supplemented by 35mm colour slides, especially where colour is an aspect that needs to be recorded, e.g. built structures and bedrock and characteristic stratigraphy.. All photographs will contain an appropriate graduated photographic scale. Digital photographs will also be taken to illustrate the report and to supplement the archive, copies will be included in the digital archive which will be supplied both to English Heritage and North Yorkshire County Council.

### **3.4 Site Monitoring**

- 3.4.1 English Heritage (EH) and North Yorkshire County Council (NYCC) will be notified at least two weeks in advance of the site works and the start of the archaeological watching brief, so that arrangements for monitoring the work can be made.
- 3.4.2 Monitoring will be arranged so that all excavated areas can be inspected in an exposed condition.

### **3.5 Health and Safety**

- 3.5.1 CS Archaeology will operate with due regard to health and safety and a copy of the risk assessment will be sent for approval to the archaeological monitors (EH and NYCC).

### **3.6 Post –Recording Work and Report Preparation**

- 3.6.1 Once the field recording work has been completed, a full report of the results of the watching Brief will be completed. The post-excavation assessment of material will be undertaken in accordance with the guidance of MAP2 (English Heritage, 1991). The report will include: background information, methods, detailed results, grid references, conclusion and discussion.
- 3.6.2 The watching brief report will include a phased interpretation of the site, if possible.
- 3.6.3 The watching brief report will also consist of a detailed context index to the archive.
- 3.6.4 The results of the palaeo-environmental assessment by an appropriate specialist will outline the potential of the samples taken and will be included in the watching brief report.
- 3.6.5 The report will provide an interpretation of the results, placing them in local and regional context.
- 3.6.6 A copy of this WSI will be included as an appendix to the final report.

### **3.7 Report Submission**

- 3.7.1 Copies of the completed report will be submitted in both hard and digital formats to:
- The Client and Client’s consultant CNP Leeds;
  - Ms G Falkingham, County Archaeologist Heritage Unit NYCC;
  - Dr K Emerick, IAM, English Heritage;
  - National Monuments Record, Swindon.

### **3.8 Submission and Deposition of the Archive**

- 3.8.1 The archive, including a copy of the report, will be compiled, indexed and then offered for deposition with the appropriate repository (Yorkshire Museum).

### **3.9 Publicity**

- 3.9.1 Provision will be made for publicising the results of the work locally, and an OASIS form will be completed for the project.

### 3.10 References

- Bayley J, et al. 2001, *Archaeometalurgy, Centre for Archaeology Guidelines*, English Heritage
- English Heritage, 1991, *Management of Archaeological Projects (MAP2)*
- English Heritage, 2002, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* [2002/01]
- English Heritage, 2002, *Scheduled Monument Description (www.magic.gov.uk)*
- Institute of Archaeologists, 2001, *Standard and Guidance for Archaeological Field Evaluations* Reading
- North Yorkshire County Council Heritage Section (NYCCHES), 2005 *Archaeological Trial Trenching* (10/2005) unpublished document.
- North Yorkshire County Council Heritage Section (NYCCHES), 2005 *Guidelines for Reporting: A Check-list (undated)* unpublished document.
- Watkinson D. & Neal V., 1998, *First Aid for Finds* (3<sup>rd</sup> edition), RESCUE & the Archaeological Section of the United Kingdom Institute for Conservation.
- Treasure Act ,1996, Code of Practice

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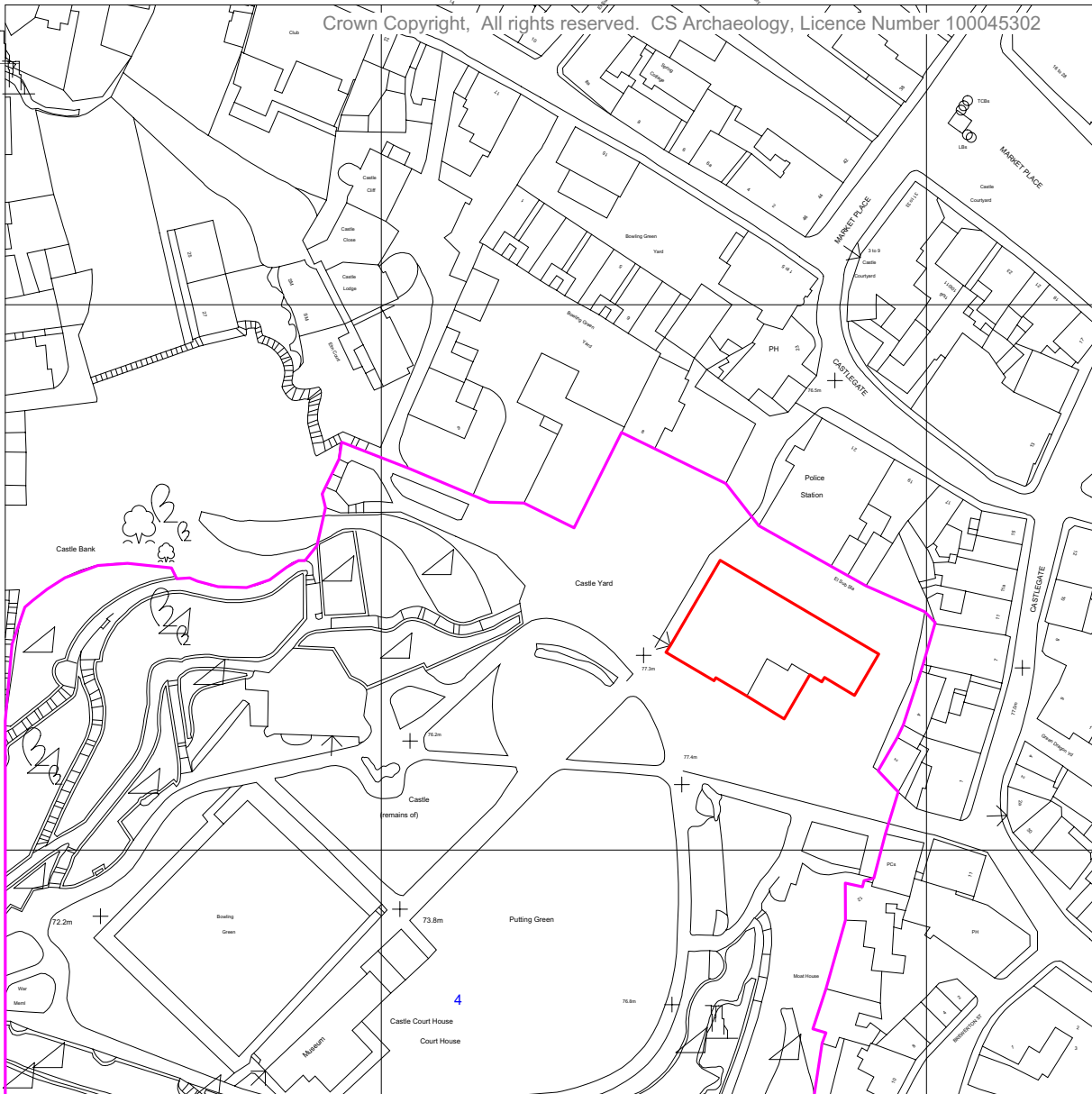
E: [chrisscurfield@yahoo.com](mailto:chrisscurfield@yahoo.com)  
M: 07963 586767

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4 570

Crown Copyright, All rights reserved. CS Archaeology, Licence Number 100045302



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31m

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31m



scale: 1:1250

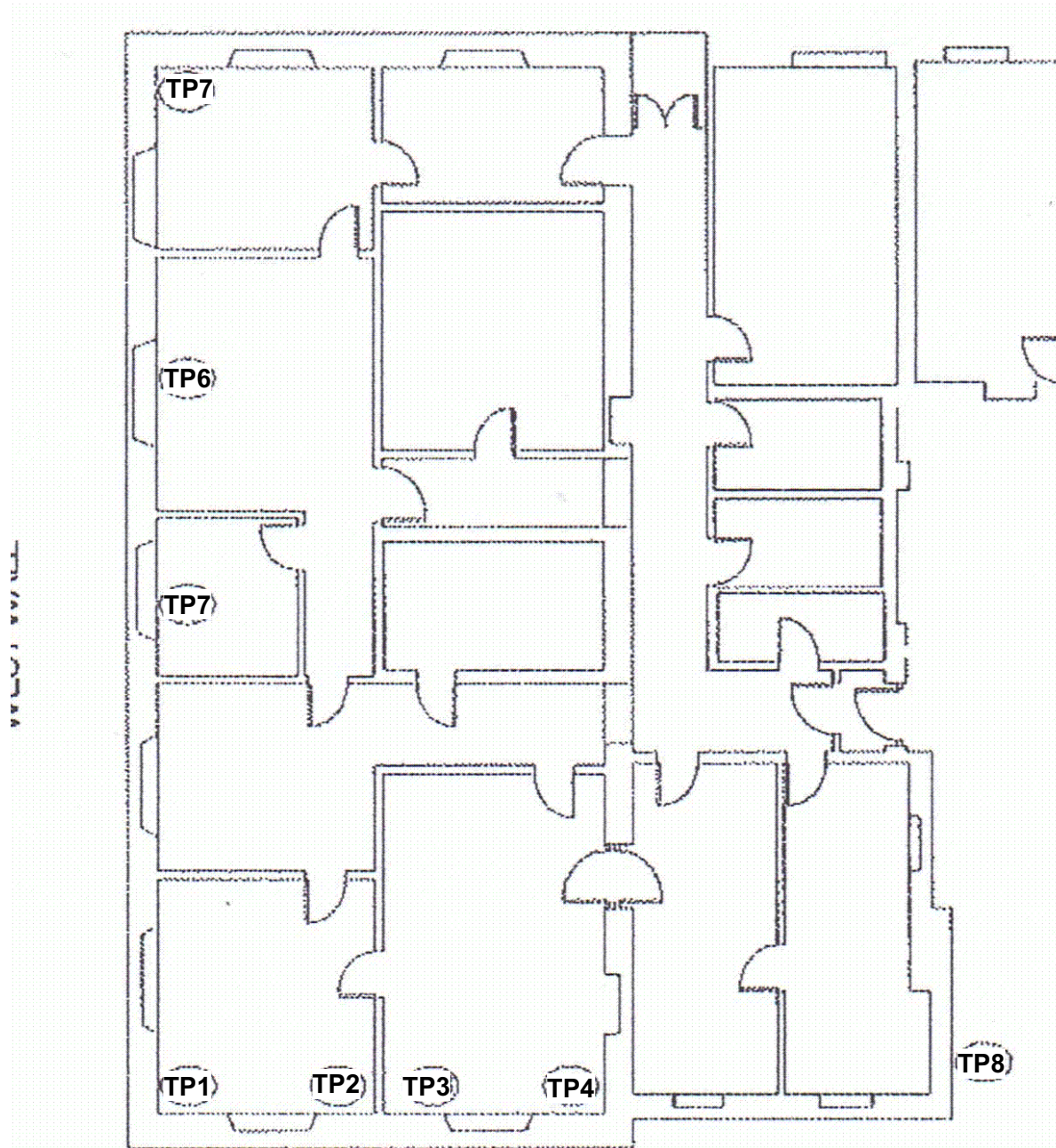
- The PDA Boundary
- Scheduled Monument Boundary (No. 34841) approximate extent


A WSI for Units 1 and 2  
 Castle Precinct, Knaresborough,  
 North Yorkshire

Figure 1: Location Map  
 of the PDA

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*not to scale*

A WSI for Units 1 and 2  
 Castle Precinct, Knarborough,  
 North Yorkshire

Figure 2: The PDA with  
 Test Pits 1-8

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## Appendix 2: Archive Inventory

PHOTOGRAPHIC REGISTER A  
35mm Black and White Film (Ilford Delta 400 Professional)

Film/ Frame No.	Position	Plate	Trench	Description	From
1/36	1		4b	View of the internal limestone support wall [123]	N
1/35	2	<b>2</b>	4b	View of the NW facing section	NW
1/34	3		-	General view of the internal excavations	NE
1/33	4		-	General view of the internal excavations	S
1/32	5		6b	General excavation view	SE
1/31	6		10b	General pre-excavation view	SE
1/30	7		11b	General view of the floor supporting walls [123]	SE
1/29	8		12b	General view	SE
1/28	9		12b	View of the NE facing section	NE
1/27	10		11b	View of the NE facing section	E
1/26	11		10b	View of the NE facing section	E
1/25	12		9b	General view	SE
1/24	13		9b	General view	N
1/23	14		8b	General view towards the exposed brick work in the southern corner	SE
1/22	15		8b	View of the NE facing section	E
1/21	16		3b	General oblique view with brick duct [108]	N
1/20	17		7b	General view	E
1/19	18		3b	General view	SW
1/18	19		3b	View of the NW facing section	W
1/17	20		3b	General view	SW
1/16	21		3b	View of the SE facing section	S
1/15	22		2b	General view	S
1/14	23		1b	General view	SW
1/13	24		2b	General view	NE
1/12	25		22b	View of the brick duct [108] underneath the southern (original) doorway B	NW
1/11	25		22b	View of the brick duct [108] underneath the Doorway B	NW
1/10	26		22b	Working view of doorway B	NW
1/9	27		23b	General view	NNE
1/8	28		19b	View of the NW facing section	E
1/7	29		22b	General view	NW
1/6	30		22b	View of the SW facing section	SE
1/5	31	<b>11</b>	22b	Oblique view of the brick duct [108] underneath the doorway B	W
1/4	32		22b	View of the brick duct [108], Doorway B	NW
1/3 – 1/1	32		22b	View of the brick duct [108], Doorway B	NW
2/32	33		11b	Pre-excavation view	SE

Unit 1, Castle Precinct, Knaresborough, North Yorkshire: An Archaeological Watching Brief

Film/ Frame No.	Position	Plate	Trench	Description	From
2/31	34		11b	Part excavation with the two exposed limestone walls [123]	SE
2/30	35		3b	View of the NE facing section	NE
2/29	35		3b	Detailed view of the NE facing section	NE
2/28	36		2b	Detailed view of the NE facing section	NE
2/27	36		1b	Detailed view of the NE facing section during excavation	NE
2/26-5	37		1b	General view of Doorway A	W
2/24-23	38		1b	Detailed view of Doorway A	W
2/22	39			General view of the northeast facing section with cast iron pipe into the centre of the room	N
2/21-20	40	7	1b	Detailed view of the brick duct [108] underneath Doorway A	W
2/19	41			General view of the NE corner of the PDA	W
2/18-17	42		-	General view of the SE corner of the PDA	W
2/16-15	38		1b	Detail of the brick duct [108] within Doorway A	NW
2/14	40		1b	Detailed view of the brick duct [108] underneath doorway A	NW
2/13	43		29b	General view	NW
2/12	44		29b	General view of the NW facing section	N
2/11	23		1b	General view	SW
2/10	45		27b	General view	NW
2/9	46		27b	General view	N
2/8	47		26b	General view	NW
2/7	48		26b	View of the NE facing section	N
2/6	49		25b	General view	NW
2/5	50		25b	View of the NE facing section	N
2/4	51		24b	General view	NW
2/3	52		24b	General view	N
2/2	53		22b	General view of the SW facing section	SW
2/1	95		13b	General view	SE
3/19	54		19b	Detail of the brick and stone structure	S
3/18	55		19b	Detail of the brick and stone structure	SW
3/17	56		19b	Detail of the brick and stone structure	SE
3/16	54		19b	Detail of the brick and stone structure	S
3/15	57		21a	General view (angled trench)	SE
3/14	58		21a	General view (angled trench) with the cast iron heating pipes	S
3/13	59		22a	General view	SE
3/12	60		22a	General view	NE
3/11	61		23a	General view	SE
3/10	62		23a	General view	NE
3/9	63		25a	General view	SE
3/8	64		25a	General view	NE

*Unit 1, Castle Precinct, Knaresborough, North Yorkshire: An Archaeological Watching Brief*

<b>Film/ Frame No.</b>	<b>Position</b>	<b>Plate</b>	<b>Trench</b>	<b>Description</b>	<b>From</b>
3/7	65		26a	General view with cast iron heating pipes	NE
3/6	66		27a	General view	NE
3/5	67		28a	General view	SSE
3/4	68		29a	General view	SSE
3/3	69		18b	General view	NW
3/2	70		18b	General view	NE
3/1	71		17b	General view	NW
4/36	14		3b	View of the heating duct	N
4/35	72		3b	View of the heating duct (cross section)	NNW
4/34	72		3b	View of the heating duct (cross section)	NNE
4/33	73		13b	General view	SE
4/32	74		13b	General view of NE facing section	NNE
4/31	75		2a	General view of NW facing section	NW
4/30	76		5a	General view	N
4/29	77		12a	General view of NE facing section	NE
4/28	78		12a	General view	NW
4/27	79		11a	General view of the SE facing section	SE
4/26	80		11a	General view	SW
4/25	81		13a	General view of the SE facing section	SE
4/24	82		13a	General view	SW
4/23	83		16a	General view of the SE facing section	SE
4/22	84		17a	General view of the SE facing section	SW
4/21	85		18a	General view of the SE facing section	SE
4/20	86		15a	General view	NE
4/19	87		14a	General view	SW
4/18	88		-	General view of the SW Elevation	SSW
4/17	89		19a	Pre-excavation view	SW
4/16	90		1a	General view (with piling case)	NNE
4/15	91		30a	General view	SW
4/14	92		20a	General view	NE
4/13	93		20a	General view of the NW facing section	NW
4/12	94		8a	General view of the SW facing section	SW
4/12	95			General view of the SW facing section	SW

PHOTOGRAPHIC REGISTER B  
 Digital colour 5 MB resolution

Position	Plate	Trench	Description	From
1		4b	View of the internal limestone support wall [123]	N
2		4b	View of the NW facing section	NW
3	<b>3</b>	-	General view of the internal excavations	NE
4		-	General view of the internal excavations	S
5		6b	General excavation view	SE
6		10b	General pre-excavation view	SE
7		11b	General view of the floor supporting walls [123]	SE
8		12b	General view	SE
9		12b	View of the NE facing section	NE
10		11b	View of the NE facing section	E
11		10b	View of the NE facing section	E
12		9b	General view	SE
13		9b	General view	N
14		8b	General view towards the exposed brick work in the southern corner	SE
15		8b	View of the NE facing section	E
16	<b>4</b>	3b	General oblique view with brick duct [108]	N
17		7b	General view	E
18		3b	General view	SW
19		3b	View of the NW facing section	W
20		3b	General view	SW
21		3b	View of the SE facing section	S
22		2b	General view	S
23		1b	General view	SW
24		2b	General view	NE
25		22b	View of the brick duct [108] underneath the southern (original) doorway B	NW
25		22b	View of the brick duct [108] underneath the Doorway B	NW
26		22b	Working view of doorway B	NW
27		23b	General view	NNE
28		19b	View of the NW facing section	E
29		22b	General view	NW
30		22b	View of the SW facing section	SE
31		22b	Oblique view of the brick duct [108] underneath the doorway B	W
32	<b>10</b>	22b	View of the brick duct [108], Doorway B	NW
32		22b	View of the brick duct [108], Doorway B	NW
33		11b	Pre-excavation view	SE
34	<b>1</b>	11b	Part excavation with the two exposed limestone walls [123]	SE
35		3b	View of the NE facing section	NE
35		3b	Detailed view of the NE facing section	NE
36		2b	Detailed view of the NE facing section	NE
36		1b	Detailed view of the NE facing section during excavation	NE
37	<b>5</b>	1b	General view of Doorway A	W

Unit 1, Castle Precinct, Knaresborough, North Yorkshire: An Archaeological Watching Brief

Position	Plate	Trench	Description	From
38		1b	Detailed view of Doorway A	W
39			General view of the northeast facing section with cast iron pipe into the centre of the room	N
40		1b	Detailed view of the brick duct [108] underneath Doorway A	W
41			General view of the NE corner of the PDA	W
42	9	-	General view of the SE corner of the PDA	W
38	6	1b	Detail of the brick duct [108] within Doorway A	NW
40		1b	Detailed view of the brick duct [108] underneath doorway A	NW
43		29b	General view	NW
44		29b	General view of the NW facing section	N
23		1b	General view	SW
45		27b	General view	NW
46		27b	General view	N
47		26b	General view	NW
48		26b	View of the NE facing section	N
49		25b	General view	NW
50		25b	View of the NE facing section	N
51		24b	General view	NW
52		24b	General view	N
53		22b	General view of the SW facing section	SW
95		13b	General view	SE
54		19b	Detail of the brick and stone structure	S
55		19b	Detail of the brick and stone structure	SW
56		19b	Detail of the brick and stone structure	SE
54		19b	Detail of the brick and stone structure	S
57		21a	General view (angled trench)	SE
58		21a	General view (angled trench) with the cast iron heating pipes	S
59		22a	General view	SE
60		22a	General view	NE
61		23a	General view	SE
62		23a	General view	NE
63		25a	General view	SE
64		25a	General view	NE
65		26a	General view with cast iron heating pipes	NE
66		27a	General view	NE
67		28a	General view	SSE
68		29a	General view	SSE
69		18b	General view	NW
70		18b	General view	NE
71		17b	General view	NW
14		3b	View of the heating duct	N
72		3b	View of the heating duct (cross section)	NNW
72		3b	View of the heating duct (cross section)	NNE
73		13b	General view	SE
74		13b	General view of NE facing section	NNE
75		2a	General view of NW facing section	NW
76		5a	General view	N

Position	Plate	Trench	Description	From
77		12a	General view of NE facing section	NE
78		12a	General view	NW
79		11a	General view of the SE facing section	SE
80		11a	General view	SW
81		13a	General view of the SE facing section	SE
82		13a	General view	SW
83		16a	General view of the SE facing section	SE
84		17a	General view of the SE facing section	SW
85		18a	General view of the SE facing section	SE
86		15a	General view	NE
87		14a	General view	SW
88		-	General view of the SW Elevation	SSW
89		19a	Pre-excavation view	SW
90		1a	General view (with piling case)	NNE
91		30a	General view	SW
92		20a	General view	NE
93		20a	General view of the NW facing section	NW
94		8a	General view of the SW facing section	SW
95			General view of the SW facing section	SW
96		14b	General view of the southwest facing section	S
97		17b	General view of the northwest facing section	N
98	<b>8</b>	Post Ex.	View of the 2 bricks from the duct [108]	-

#### DRAWING REGISTER

Dwg. No.	Figure	Description	Scale Drawn	Reproduced
1		Cross Section of the original southern doorway	1:20	1:20
2		Cross Section of the original northern doorway	1:20	1:20

#### CONTEXT REGISTER

Context No.	Location	Description
101	Doorway A	Modern concrete block work (c.2010)
102	Doorway A	Modern concrete floor up to 0.1m deep
103	Doorway A	Modern loose back fill and concrete, acting as a levelling deposit, up to 0.22m deep. Lies underneath [102], above [104]
104	Doorway A	Loose silty sand, up to 0.21m deep, unstratified back fill
105	Doorway A	Very dark brown (black) sandy silt (soot) up to 0.03m deep lying above a fine grey silt (powered) immediately above the flagstone
106	Doorway A	Flagstone acting as a the structure's base with a central dished channel that corresponds to the central duct
107	Doorway A	Buff coloured gritty sand, appears to be crushed limestone
108	Doorway A	Red bricks c. 1814, approximately, length 0.225m x 0.65m x 0.011m With occasional use of over fired brick. Very similar bricks employed in the southern doorway [008a]
109	Doorway B	Light brown sandy clay, up to 0.05m deep

Context No.	Location	Description
110	Doorway B	Concrete floor that predates and lies below the present (2010) floor [102]. Apparently inserted at the same level as the original flagged floor as evidenced by the flagstone beneath the historically blocked door jamb
111	Doorway B	Loose red building rubble, red brick fragments in a sandy clay matrix, with fragments of lime plaster
112	Doorway B	Brown silty and lime mortar, a mixed levelling deposit. Underlies [111], overlies [113]
113	Doorway B	Mid brown silty sand with occasional fragments of burnt flagstone. Underlies [112], overlies [114]
114	Doorway B	Reddened (heat affected) lime mortar. Underlies [113], overlies [115]
115	Doorway B	Pale silt (ash) Pink coloured silt with burnt flagstone fragments (7%) Underlies [114], overlies [118]
116	Doorway B	Accumulated deposit predominantly consisting of eroded lime mortar with lens of dark brown sandy silt towards the upper interface with [111]. Underlies [111], overlies [118]
117	Doorway B	Accumulated deposit featuring alternate lenses of lime mortar and brown sandy silt similar to [116]. Underlies [111], overlies [118]
118	Doorway B	Horizontally positioned flagstone set upon three brick piers [108a], 0.07m thick and at least 0.45m in width.
119	Doorway B	Loose sandy silt with frequent brick fragments situated along the northern edge of the structure. Accumulated deposit subdivided into lenses. Lies above [108a]
120	Doorway B	Brown sandy silt with brick and mortar fragments accumulated deposit subdivided into lenses. Lies above [108a]
121	Southern Doorway	Brown sandy silt with brick and mortar fragments. Lies above [108a]
122	Throughout PDA	Limestone walls (coursed) occurring as structural building walls and as structural floor supporting walls
123	Throughout PDA	Limestone walls (coursed) occurring as structural building walls 0.5m wide and roughly faced to both sides similar to the extant structural walls of the building [122]. Probable use as a structural floor supporting walls



TRENCH REGISTER

Trench	Evidence
1	Limestone walls [123] and brick duct [108] present bisected the trench and exiting the Doorway A to the east. Trench 1a
2	Limestone walls [123] and brick duct [108] present bisected the trench
3	The inner limestone wall [123] butt ends just short of the brick duct [108] which turned into the trench from the southwest and exited to the southeast
4	Limestone walls [123] present
5	Limestone walls [123] present
6	Limestone walls [123] present
7	Limestone walls [123] present
8	Limestone walls [123] present
9	Limestone walls [123] present
10	Limestone walls [123] present
11	Limestone walls [123] present
12	Limestone walls [123] present
13	Disturbed stratigraphy
14	Disturbed stratigraphy
15	Disturbed stratigraphy
16	Disturbed stratigraphy
17	Disturbed stratigraphy
18	Disturbed stratigraphy
19	The side of the brick duct [108a] present across the north-eastern end of the trench. Externally cobbled road surface revealed
20	The side of the brick duct [108] bisected the trench
21	The side of the brick duct [108a] present across the north-eastern corner of the trench and is associated with the cast iron heating system, with large bore pipes turning a 90 degrees and smaller bore pipes laid through Doorway B
22	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
23	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
24	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
25	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
26	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
27	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
28	Disturbed stratigraphy with large bore cast iron heating pipes bisecting trench
29	Disturbed stratigraphy (no features)
30	Disturbed stratigraphy (no features)