



YORK ARCHAEOLOGICAL TRUST



Archaeological Investigations at Northallerton Prison

By Toby Kendall and Rebecca Wilson

YAT Assessment Report 2018/108 December 2018



Photograph ©David Dodwell 2017



YORK ARCHAEOLOGICAL TRUST



York Archaeological Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. We manage projects, provide professional advice and fieldwork to ensure a high quality, cost effective archaeological and heritage service. Our staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York, Sheffield, Nottingham and Glasgow the Trust's services are available throughout Britain and beyond.

York Archaeological Trust, Cuthbert Morrell House, 47 Aldwark, York YO1 7BX

Phone: +44 (0)1904 663000 Fax: +44 (0)1904 663024

Email: archaeology@yorkat.co.uk Website: <http://www.yorkarchaeology.co.uk>

© 2018 York Archaeological Trust for Excavation and Research Limited
Registered Office: 47 Aldwark, York YO1 7BX
A Company Limited by Guarantee. Registered in England No. 1430801
A registered Charity in England & Wales (No. 509060) and Scotland (No. SC042846)

CONTENTS

NON-TECHNICAL SUMMARY	IV
KEY PROJECT INFORMATION	IV
1 INTRODUCTION	1
2 METHODOLOGY	1
3 LOCATION, GEOLOGY & TOPOGRAPHY.....	3
4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	4
5 RESULTS	6
6 DISCUSSION	19
REFERENCES	24
ACKNOWLEDGEMENTS	25
APPENDIX 1 – INDEX TO ARCHIVE	26
APPENDIX 2 – CONTEXT LIST	27
APPENDIX 3 – WRITTEN SCHEME OF INVESTIGATION	35
APPENDIX 4 – POTTERY ASSESSMENT REPORT	56
APPENDIX 5 – THE ANIMAL BONE	58
TABLES	60
PLATES.....	63
FIGURES.....	75

Plates

Plate 1 Trench 5, The Treadmill, facing NNW (© David Dodwell 2017).....	63
Plate 2 Overview of Trench 1	63
Plate 3 Section where the Early Quadrangle Wall (c1013), on the left, joins the prison wing wall (c1015), on the right, in Trench characterised by a change in brick thickness and mortar.....	64
Plate 4 Overview of Trench 2	64
Plate 5 Chimney footing (c2012) in Trench 2. Elevation with concrete base visible	65
Plate 6 (c2010) and boiler use deposits (c2011) in Trench 2	65
Plate 7 Overview of Trench 3	66
Plate 8 Early Quadrangle Wall (c3008) in the yard area of Trench 3.	66
Plate 9 Culvert (c3011) in the yard area of Trench 3	67
Plate 10 Overview of Trench 4	67
Plate 11 Section in Trench 4 sondage showing the layers of pre-prison landscaping (c4005) and the buried soil (c4006).....	68
Plate 12 Keys disposed of within concrete during the early 20th century (c4004).....	68
Plate 13 Image of keys produced by orthorectified photogrammetry (1:10)	69

Plate 14 Overview of Trench 5	69
Plate 15 Treadmill overview	70
Plate 16 Overview of Trench 6	70
Plate 17 Main Courthouse wall c6007 with internal walls	71
Plate 18 Trench 6 section with yard/path surface	71
Plate 19 Image of cell area produced by orthorectified photogrammetry (1:50)	72
Plate 20 Sump or soak-away for the Courthouse comprised of reused slate roof tiles with visible pegholes.	73
Plate 21 Reused worked stone steps as a footing or cap feature within the Courthouse cell area (c6025)	73
Plate 22 Detailed plan of the treadmill layout from Captain Worselys 1849 designs for the Northallerton House of Correction	74
Plate 23 Detailed plan of the treadmill including the addition of the grain mill to the south. From proposed plans from 1870.	74
Plate 24 Aerial photograph of the prison taken in 1968. Unknown source.	74

Tables

Table 1 Investigation Areas (as per WSI)	1
Table 2 Trenches Excavated	2
Table 3 Index to Archive	26
Table 4 Context List	27
Table 5 Pottery Quantification	57
Table 6 Animal Bone from Northallerton Prison	58
Table 7 Drawing Register	60
Table 8 B&W Photographic Register	60

Figures

Figure 1 Regional Site Location	75
Figure 2 Detail Site Location	75
Figure 3 Trench Locations	75
Figure 4 Trench 1	75
Figure 5 Trench 2	75
Figure 6 Trench 3	75
Figure 7 Trench 3 Section	75
Figure 8 Trench 4	75
Figure 9 Trench 5	75
Figure 10 Trench 6	75
Figure 11 Trench 6 Section	75
Figure 12 Trench 1, 2, 3 and 6 1838 Historical Map Overlay	75
Figure 13 All Trenches 1870 Historical Map Overlay	75
Figure 14 All Trenches 1956- early 1980s Historical Map Overlay	75
Figure 15 Early 19th Century Prison and Archaeological Results	75
Figure 16 Late 19th Century Prison and Archaeological Results	75

Abbreviations

BGL Below Ground Level

CBM Ceramic Building Material

HDC Hambleton District Council

WSI Written Scheme of Investigation

YAT York Archaeological Trust

NON-TECHNICAL SUMMARY

During September 2017 York Archaeological Trust (YAT) completed an excavation at HM Northallerton Prison, Northallerton, North Yorkshire, DL6 1NW (SE 37115 93808). The Archaeological works were undertaken for Hambleton District Council under direction of a Written Scheme of Investigation (WSI) created by YAT (2017) as part of the planning application CNY14985, NYCC Brief, HMPYO1, Northallerton.

A total of 6 areas were investigated across two phases of excavation and the well preserved archaeology encountered was entirely linked to the different phases of the prison as it developed from the late 18th century onwards.

The following report is a detailed assessment of what was revealed. Site investigations took place in September 2017 and July 2018 with potential for further documentary research on the archival material available.

In addition to the archaeological works to satisfy planning requirements Hambleton District Council funded significant additional public access to the project. This took the form of open days, site tours, archaeological skills workshops and on site excavation. Over 3000 people were able to engage with the archaeology of the Former Prison site.

KEY PROJECT INFORMATION

Project Name	Northallerton Prison
YAT Project No.	5967
Document Number	2018/108, 1 st phase 2017/88
Type of Project	Evaluation & Public Archaeology
Client	Hambleton District Council
Planning Application No.	CNY14985, NYCC Brief, HMPYO1, Northallerton
NGR	SE 37115 93808
Museum Accession No.	YORYM:2018.1
OASIS Identifier	yorkarch1-324565

REPORT INFORMATION

Version	Produced by		Edited by		Approved by	
	Initials	Date	Initials	Date	Initials	Date
1 DRAFT	TK/RW	15/12/17	IDM	18/12/17	IDM	18/12/17
2 DRAFT	TK/RW	23/08/18	IDM	24/08/18	IDM	28/08/18
3	TK/RW	27/11/18	IDM	03/12/18	IDM	04/12/18

Copyright Declaration:

York Archaeological Trust give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although York Archaeological Trust retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

Disclaimer:

This document has been prepared for the commissioning body and titled project (or named part thereof) and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of the author being obtained. York Archaeological Trust accepts no responsibility or liability for the consequences of this document being used for a purpose other than that for which it was commissioned.

1 INTRODUCTION

During September 2017 and July 2018 York Archaeological Trust (YAT) completed two phases of excavation at HM Northallerton Prison, Northallerton, North Yorkshire, DL6 1NW (SE 37115 93808) (Figures 1 and 2). The Archaeological works were undertaken for Hambleton District Council under direction of a Written Scheme of Investigation (WSI) created by YAT (2017) as part of the planning application CNY14985, NYCC Brief, HMPYO1, Northallerton.

A desk based assessment was produced by Compass Archaeology (2016) which outlined the history of the area and focused largely on the development of the prison. It concluded that archaeological remains would likely relate to pre-existing 18th and 19th century prison buildings with little potential for earlier deposits.

The resulting archaeological remains were entirely made up of features and materials from the late 18th century onwards, all of which were directly linked the prison and its development over the next two centuries.

Although modern development of the prison in the late 20th century was responsible for significant truncation of the site, the earlier structures, where present, were well preserved. Elements from the early late 18th century original prison, the later 19th century prison wings, Cookhouse, Smithy, Pump house, Treadmill and Courthouse were all encountered.

Alongside the contracting archaeology a well-received portfolio of open days, guided tours, archaeological skills workshops and on site excavation was conducted. This had an audience of over 3000 people who directly interacted with the archaeological works. Significantly more people were able to hear about the findings through local press, radio and television.

This report is an assessment of both phases of excavation.

2 METHODOLOGY

The detailed written scheme of investigation for the site can be viewed in Appendix 3.

Following demolition, the site had been left with extant surfaces of tarmac and concrete, or level areas of rubble where buildings had previously stood. The initial machine excavation during the first phase of the works was based on areas in the following table:

Table 1 Investigation Areas (as per WSI)

Area	Size (m)	Rationale
1	Variable	To investigate and define the extent of the Smithy, the Prison Cook House and any associated midden deposits, and also the 1820's prison wing
2	Variable	To investigate possible coach house remains, any evidence of the 1820 prison wing, and the exercise yard to the south of the female wing. There is also potential for the dead house or 'drop room' to be investigated.
3	Variable	To investigate and define the extent of the treadmill (1852) and pump house.

4	Variable	To investigate the earlier gate house
5	Variable	To investigate the stables

In both phases of excavation, a 14 tonne 360° tracked excavator fitted with toothed and toothless buckets, as appropriate, was used for the machine stripping. Initial loose rubble and more solid obstructions were removed with the toothed buckets, with the toothless bucket used for final 'clean' stripping.

Clearance was conducted until solid, in-situ, structures or surfaces were encountered. In areas 4 and 5 it was not possible to excavate due to below ground obstructions or potential for live services. In both cases it was highly likely that any archaeological remains had been significantly impacted upon by the later intrusions.

A total of 6 discrete trenches were excavated across two phases of excavation; these are indicated in Figure 3 and on the table below:

Table 2 Trenches Excavated

Trench	Size (m)	Rationale
1	c.10x8.5	To investigate and define the Prison Cook House and any associated midden deposits, and also the 1820's prison wing. Part of Area 1. Excavated in 2017
2	c.13x12	To investigate and define the Prison Cook House and any associated midden deposits, and extent of the Smithy. Part of Area 1 Excavated in 2017
3	c.12x20	To investigate and define any evidence of the 1820 prison wing, and the exercise yard to the south of the female wing. Part of Area 2. Excavated in 2017
4	c.8x9	To investigate and define the Pump House. Part of Area 3. Excavated in 2017
5	c.10x25	To investigate and define the Treadmill Part of Area 3. Excavated in 2017
6	c.8-10x30	To investigate and define the Courthouse Excavated in 2018

Deeper machine cut sondages, looking for the depth of natural and pre-prison ground levels, were excavated into Trench 1, 2, 3 to coincide with features that required investigation. Two further machine cut sondages were excavated to investigate natural adjacent to Trench 4.

The trenches were then hand cleaned to define the features which had been revealed. Smaller areas of hand excavation were used to define relationships and explore features as deemed necessary.

Recording was completed as per the WSI:

- Trench boundaries and modern features were surveyed to c.15mm accuracy using a GPS system. In the case of Trench 6 the trench was located using offsets from the standing buildings.
- An arbitrary 5m grid was aligned over each trench for planning at 1:20. This grid was then geolocated using the GPS system. The site grid and composite planning was aligned with the orientation of the former buildings. However, written records and descriptions used true north when being completed.
- Sections and elevations were drawn as appropriate.
- Trenches and significant features were photographed using B&W film and digital photography. Additional context record shots were taken using digital photography. At the end of the excavation process a further series of high level photographs were taken using a digital camera mounted on a pole.
- Individual context numbers were assigned and recorded as per the YAT recording manual
- Finds recovered were assessed on site and material such as animal bone, pottery and small finds were packaged for further assessment. Unstratified finds and other materials such as large volumes of metal which did not require assessment were left for HDC to use for educational purposes.

In all cases excavation and recording was completed as deemed appropriate by the archaeological team on site. For example not every single wall construction cut, construction backfill and elevation was recorded in detail.

No samples were taken as no material of either organic or industrial potential was encountered.

3 LOCATION, GEOLOGY & TOPOGRAPHY

The site of the former Northallerton Prison occupies a roughly oval area of 1.23 hectares to the south east of Northallerton High Street. It is bounded by Crosby Road to the east, East Road to the west and The Link to the South. To the north Crosby Road and East Road converge to create the northern point of the prison area.

The site stands within a built up urban area: a large supermarket, domestic dwellings and other commercial premises lie to the west; a line of residences, the fire station and the police station lie to the east; and part further commercial premises to the south.

The solid geology of the site is mudstone from the Mercia Mudstone Group, formed in the Triassic period. This is predominantly sealed by the Vale of York Formation, composed of clay, sands and gravels, formed during the Quaternary period (www.bgs.ac.uk, accessed 06/11/17).

The topography of the site, based on a pre-demolition topographical survey, indicates that the prison was largely flat with a slight slope of less 1m from the south corner, at around 41.20m AOD, to towards the north, at around 40.60m AOD. There are small variations across the entire site.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A detailed desk based assessment was prepared by Compass Archaeology on the history of Northallerton Prison before excavation and development. The contents of that report are summarised here while further details can be found within that document.

Prehistoric/ Roman

There is no evidence of prehistoric or Roman activity on the site. The larger area of Northallerton has shown some evidence of activity including Romano-British pottery from an excavation on the land adjacent to the west (Compass, 2016).

Anglo-Saxon

Northallerton has origins in the Anglo-Saxon period and there is significant evidence of Saxon activity in the area. A stone-built church from the 9th century is one of the oldest buildings in the town while other Saxon stone carvings have been identified in All Saints Church. The town is mentioned in a number of Saxon sources as the site of battles (Weightman, 2016).

Medieval

There has been consistent evidence and investigation of medieval Northallerton. The establishing of religious institutions is perhaps the most prominent feature of the period, including an Augustinian Friary (now the Fleece Inn, which also dates to the 15th century) and a Carmelite Priory (excavated in 2006). A Maison Dieu is referred to within historical texts, established in 1467, which catered to 'poor wayfarers'. Much of the excavation evidence of medieval Northallerton explores the Burbage plots, characterised by domestic features: pits, wells, ditches, and the remains of structures, such as at Rutson Hospital to the north of the prison (YAT 2016/18). Despite a well-established medieval history in the rest of Northallerton there is no evidence of medieval activity on the former Northallerton prison site, with the medieval town being focused on the high street to the west.

Post-Medieval

As with the medieval activity in Northallerton, evidence of the post-medieval period in Northallerton is focused on the High Street. Some of the buildings still standing in Northallerton were constructed during this period and there is evidence of the town's growth and industrialisation with the construction of Rutson hospital and a mineral water factory.

18th Century

The former Northallerton Prison site is referenced as the area 'Priest's Garth' on maps from the 17th and 18th century. The area was described as 'low and swampy' by, Joseph Lemuel Saywell in his history of Northallerton in 1885, as well as the 'receptacle for the rubbish of the town' (Saywell, 1885). It ceases to be called 'Priest's Garth' in 1784 when the House of Corrections was first proposed.

The original plans for the prison were designed in the late 18th century by John Carr. The 1798 Northallerton Tithe Map shows the development of the House of Corrections with the first visible buildings.

19th Century

The Northallerton House of Corrections saw massive growth in the 19th century, primarily in two phases which altered the extent of the prison. The first expansion included the Gaolers house, eventually the Governors house, between 1826 and 1828 and designed by architect George Atkinson. Robert Creighton's map of 'North Allerton' included the basic 'quadrangle' shape that characterised the early prison but had no greater detail.

The first detailed plan of the prison came with the production of Captain Worsely's ground plan in 1838 which showed the full early quadrangle and included demarcation of the first treadmill to the east of the Governors House. Another version of this plan showed proposed expansions along the east and west prison walls to form 'washing sheds' and 'work rooms'; these alterations were never carried out.

The prison became 'crowded almost to suffocation' during the 1830s and 1840s (Ingledeu, 1858) which resulted in more expansions to the south including a new three storey male wing, a female wing, and the demolition of the old hospital to construct four new hospital 'rooms' instead (Ingledeu, 1858). These additions are visible on Captain Worsely's 1849 ground plan and his earlier 'proposed' plan as well as Richard Frances 'Plan of Northallerton Public Health', drawn in 1852. The 1852 map is the first appearance of the Chimney attached to the cookhouse. These plans show the distinctive 'crucifix' shape that defined the prison for most of its occupation.

The Pump House to the south west corner of the prison first appears on the 1849 ground plan but not the 1852 Frances' map. The treadmill, that was at a point reputedly the largest in the world, is not illustrated on a plan of the prison until Worsely's 1870 ground plan though the treadmill existed from the 1850s onwards. The treadmill closed under the 1898 Prison Act but was probably still in use up until 1902.

The 1870 Worsely plan was the most comprehensive of the plans from the late 19th century and depicted the North Riding Court house, a coach house and a stable which were all later alterations. The other plans from the latter half of the 19th century tended to only illustrate the court house clearly, omitting details of the prison itself, apart from the 1894 OS map which does illustrate a basic prison plan but is not annotated. This was done for security reasons as is typically associated with prisons and military complexes.

20th Century

Plans of the prison continued to illustrate it as a single entity with no detail into the early 20th century, from c.1892 to c.1938. Renamed as Her Majesty's Prison in c.1864 the prison closed to female prisoners in 1904 before closing entirely in 1922 due to a reduction in crime.

It was reopened and repurposed during the Second World War as an Army Gaol. It housed prison from c.1943 and in 1946 made national headlines for the 'Glasshouse riots' where prisoners caused damage to the prison by setting fire to the store rooms and throwing slate tiles from the roof onto the guards below.

A photograph from 1968 shows that the 19th century prison buildings have largely survived apart from the Pump House and Treadmill buildings. A map produced by a prison guard from 1950 to 1980 shows where the newer buildings and the 19th century prison intersect.

In the latter half of the 20th century the prison went through many name and purpose changes as well as modernisation. In 1964 the prison became the 'Northallerton Young Prisoners Centre,' in 1983 the 'Northallerton Youth Custody Centre,' in 1994 a 'Remand Centre' for 16-21 year olds awaiting trial and, finally, in 2010 expanded from a YOI to a YOI/HMP, housing both young offenders and adults. The stages of modernisation at the prison included the improvements to living conditions, demolition of the obsolete 60ft-high chimney and extension of the prison walls in the 1960s as well as a £7m investment in 1995 for a five-year enhancement program.

In October 2013 the prison was finally closed as part of a government initiative to "replace prisons that were either too expensive to run or needed substantial capital investment".

5 RESULTS

The archaeological results are presented in a trench by trench basis, chronologically from earliest to latest. A more thematic chronological overview of the remains is presented in the Discussion, section 6, below.

On-site constraints in the way of services, concrete slabs and the concrete pile reinforced perimeter wall, prevented the investigation of parts of the site. Specifically, this related to the former gatehouse (area 4 in the WSI) and the stables (area 5 in the WSI).

5.1 Trench 1 (Figure 4 and Plate 1) 10m x 8.5m. Southern half of Area 1 in the WSI

This trench was located over the junction between the southern end of the previously demolished cookhouse and the western wing. It was separated from Trench 2, below, to allow for spoil management and access.

5.1.1 *Natural (Groups 107 & 108)*

Undisturbed natural deposits (c1007) were encountered at c1.2m BGL, c39.59m OD. The natural was a gravely clay which, in turn, was topped by c100mm of grey sandy clay which appeared to be a buried topsoil (c1006), forming the earlier, pre-prison, ground surface. This buried soil was anecdotally referred to as boggy or swamp-like prior to the building of the prison though its water-logged nature is more visible in the sondages in Trench 4 than in Trench 1.

5.1.2 *Early Prison (Group 106)*

On top of the buried ground surface a more mixed make-up deposit (c1005) of pebbly sandy clay was present. This contained finds in the way of small CBM fragments, pottery and animal bone. The pottery was all clearly post-medieval in date and the animal bone was in good condition, with little evidence that it was of any significant age and thus not residual. Variations of this deposit (c2005, c3005, c4005, c5005) were encountered across site and have been attributed to a landscaping event in preparation for the construction of the prison.

A section of wall (c1013) which was probably the original quadrangle prison wall depicted on early plans (1838 plan). The wall, which expands from three courses to four courses wide at its southern end as can be seen on the 1838 mapping, was bonded into and became part of the

later cookhouse wall see below (c1015) (Plate 2). The bonding for the wall was a distinctive pink/grey mortar that characterised the earlier structures across the site.

The wall is continued in Trench 2 (c2014) and the parallel prison wall is visible in Trench 3 (c3009). No finds were recovered from the construction event for the wall.

5.1.3 *Expansion of the Prison Wing and Cookhouse (Groups 105)*

The earliest part of the prison wing appeared to fall short of the area investigated thus only the prison wing expansion and the scullery areas of the cookhouse were exposed.

The 1838 ground plan was produced pre-expansion and illustrated the original 1820s prison wing which did not extend to the full width of the quadrangle. An altered version of this plan shows proposed plans for buildings in this area; however, much like proposed plans in 1849, there is no evidence within the archaeological record that these were ever constructed.

The archaeology largely reflects the 1848 plan with the prison wing expanding to the west and the cookhouse built NNW-SSE along the western edge of the prison. The main west wall (c1012), prison wing wall (c1015) and partition wall between (c1014) are all visible on the 1849 and 1870 general plans.

The differences in the 1849 and 1870 plans and the archaeological record in this area can also be explained by the fact that all contexts exposed during excavation are below the original prison ground level. The alterations in the prison expansion are possibly due to being in a lower ground area instead.

No finds were recovered from archaeological deposits from this period further confirming the finds sterile nature of the prison construction phases.

5.1.4 *Later Alterations (Group 104)*

An extensive underground duct system through the cookhouse and larger kitchen area, inferred to have been installed with the boiler, is suggested by the existence of two major flues or ducts. The first (c1009), aligned NNW-SSE, consists of a flagstone base and a 2 course wide wall measuring a combined width of 0.60m. Above the flue was a corridor visible on the 1849 and 1870 ground plans. Another duct or channel (c1016), aligned NNW-SSE, extends out 3.4m long and 0.30m wide from the main internal wall (c1014) within the 'scullery' area. A single course brick structure survives on each side at its southern most point where it butts c1014 with flagstones acting as a base.

The internal walls within the prison wing expansion are also altered from how they appear on the general plans. Stub wall c 1018 may be the bath partition wall visible on the 1870 ground while wall c1020 can be interpreted as an internal section of the 'bath' area.

5.1.5 *Earlier 20th Century Construction (Group 102 & 103)*

Two cast iron pipes, probably for services such as gas or water, were possibly installed during this period. The smaller (40mm diameter) pipe (c1010) truncates the west wall but a definitive relationship between the larger (60mm diameter) pipe (c1011) and the western wall (c1012) is impossible to distinguish due to truncation by modern concrete stanchions (c1002). It is likely, due to the pipes proximity to each other, that they are contemporary to each other.

A salt-glazed drain (c1008) and glazed tile gutter (c1009) run parallel to the western wall but no clear relationship exists between the contexts themselves or the west wall due to modern truncation. It is likely the drain and gutter are contemporary with each other.

The original prison wing was demolished before the cookhouse and prison expansion and replaced with a modern building which is visible on the 1956-1980 plan. The external walls of the building lie outside the area of investigation though an internal wall (c1004) is visible to the SSE corner of Trench 1. Another modern L-shaped wall (also c1004) from a different building lies to the N corner of the trench. On the most recent plan this was identified as 'probation' though earlier plans refer to it as the 'bathhouse'

5.1.6 *Later 20th Century Construction/Demolition (Group 101)*

The cookhouse and prison wing extension were demolished in an earlier demolition event, possibly in the late 1980s or early 1990s which was visible within demolition deposits across Trench 1 (c1003).

There is no indication in the archaeological record or in the more recent ground plans that there was another structure built upon the area post-demolition of the cookhouse and prison wing.

The four concrete stanchions (c1002), generally measuring 1.8m x 1.12m x 0.18m, are set at intervals of approx. 1.5m apart and run NNW-SSE on the western edge of the trench, truncating the western wall. These were initially presumed to be part of the building that succeeded the cookhouse but with no documentary evidence of a second building it seems likely that either the succeeding building was temporary or that the stanchions were being used to shore up the standing modern buildings instead. Though there is no documentation for the use of the stanchions, the positioning suggests that they may be bollards that were related to a road through the prison.

5.1.7 *Modern Demolition (Group 100)*

Final demolition of the prison was completed between October 2016 and June 2017 (c1000 and c1001).

5.2 **Trench 2 (Figure 5 and Plate 3)** 13m x 12m. Northern half of Area 1 in the WSI.

This trench investigated the top of the northern end of the demolished cookhouse, the chimney and into the smith's shop. This was separated from Trench 1, above, to allow for spoil management and access.

5.2.1 *Natural (Group 208 & 209)*

Undisturbed natural deposits were encountered at c1.68m BGL, c38.92m OD. In this case they were seen in the side of the deeper excavation revealing the foundations for the chimney. The natural (c2007) and possible buried topsoil (c2006) were similar to the orange gravelly clay natural and grey sandy clay buried soil from the same contexts in Trench 1. Natural deposits were exposed at a greater depth compared to Trench 1 due to the combination of a natural slope across the site and the location of the sondage next to the chimney footing in Trench 2 which had truncated natural.

5.2.2 *Early Prison (Group 207)*

No clear pre-prison deposits were seen, only those visible in the section of the chimney excavations (c2005). As discussed in 5.1.2 there is a substantial layer of pre-prison landscaping. The extremely truncated remains of the early quadrangle wall (c2014) were exposed in two areas of Trench 2 acting as a continuation of the wall in Trench 1.

A small section of the wall was uncovered along the southern edge of Trench 2, a continuation of its alignment in Trench 1 (c1012), and we can extrapolate that the quadrangle wall was amalgamated into the cookhouse structure as its eastern wall. This wall section was truncated by alterations to the oven complex attached to the chimney.

The second section of surviving wall is to the northern edge of Trench 2. The wall has been truncated by 20th century construction (c2004) to the south and the wall of the Smith Shop (c2013) to the north. It is likely that the chimney footing originally truncated the wall to the south.

5.2.3 *Construction of the Smith's Shop, Cookhouse, boiler room and chimney (Group 205 & 206)*

The majority of the features within Trench 2 were constructed during the 19th century. However, there is more than one phase of construction visible within the archaeology. The cookhouse itself, as previously stated, was not exposed but associated features were, including the boiler room, chimney footing, and the oven.

The earliest feature from this period is the Smith's Shops wall (c2013) visible in the north corner of trench 2. A well-established wall footing that stands 6 courses wide, 4 courses high and bonded with light grey mortar. The building first appears on the 1838 ground plan and is one of main features of the original expansion. The majority of the Smith Shop lay outside our area of investigation due to its proximity to the standing Administration Block which is part of Grade II listed buildings at Northallerton Prison.

The west wall of the cookhouse (c2008) runs NNW-SSE along the western edge of the Trench, continuing from Trench 1 (c1012) and remains largely unaltered.

The major features within Trench 2 are the boiler structure (c2010) and the chimney footing (c2012) (Plate 4); the chimney first appears on the 1852 map though there are designs for the chimney, oven and a 'steam generating boiler' as labelled on the 1849 plan. The boiler structure as it was exposed during excavation is visible only the 1870 ground plan and is discussed below. However, it is likely that, as it has the same dimensions as the chimney footing, an original form of the boiler was designed and possibly constructed in a similar period to the chimney. The chimney footing stands 28 brick wide at top and was exposed to 12 courses high. It was built on a foundation of concrete that extends a further 1m into the ground.

The oven itself (c2015) has been largely truncated by later alterations to the boiler and modern demolition. Located in the NE area of Trench 2 only a wall and post-activity infilling survive of the oven. The majority of the oven is outside the area of investigation. The oven was identified as within the bake room and connected to the chimney on the 1870 ground plan but, as mentioned above, was designed in 1849 proposals.

5.2.4 *Later Alterations (Group 203 & 204)*

The boiler, as exposed during excavation, was first illustrated on the 1870 ground plan as two boilers and not as one large structure (Plate 5). This was seen in the archaeology as the two flues that ran parallel to each other, entering the structure from the NNW. The flues are recognizable due to the use deposits (c2011) of black cinder that were exposed during the excavation. The use deposits date from up until the decommissioning of the boiler which was in the 20th century.

The flue attached to the west wall (c2009) also continues from Trench 1 (c1017) with the NNW end identical to its counterpart. The SSE end of the flue (c2009) has been altered in the later 19th century; the flagstone base was expanded to a two flagstone width and the partition wall replaced by a larger internal wall (c2017). A section of the boiler, that possibly doubles as a dividing wall between the boiler and 'bake room' which is visible on the 1870 general plan, projects towards the west wall and flue. Mirroring this section of the wall is c2018 that has been interpreted as the other side of the 'bake room'. Both walls have been butted by c2017. It is likely that the alterations to the flue, including the construction of c2017, were necessitated by activity in the 'bake room'. Truncation by modern concrete stanchions has made relationships difficult to define in this area.

The central duct (c1016) that ran from wall c1015 in Trench 1 continues on the south edge of Trench 2 as c2016. Though no physical relationship exists staining visible during machining suggested that the duct continued in to the boiler.

5.2.5 *Earlier 20th Century Construction (Group 202)*

There are some areas of early 20th century construction within Trench 2 before the Cookhouse, Chimney and Smith Shop were demolished in the 1980s or 1990s (c2003).

The SE corner of the boiler has been truncated and altered by an early modern brick structure (c2004) that is probably a later flue or piping addition related the modern 'bath house'. The bath house was left standing when the cookhouse was demolished.

The north side of the boiler (c2010) had been truncated by the construction of what appears to be a sump tank.

The west side of the oven area (c2015) has been filled with early modern concrete possibly related to the boiler alterations

5.2.6 *Later 20th Century Construction/Demolition (Group 201)*

As previously stated there appears to be no evidence of a modern building replacing the Cookhouse after its demolition. The concrete stanchions continue along the trench edge and are likely bollards as discussed in 5.1.6.

The oven wall (c2015) was cut into by a modern plastic pipe (c2002) which was probably a modern water pipe or drain for the standing bath house.

5.2.7 *Modern Demolition (Group 200)*

Final demolition of the prison was completed from between October 2016 and June 2017 (c2000 and c2001).

5.3 **Trench 3 (Figure 6 and Plate 6) 12mx20m. Area 2 in the WSI.**

This Trench was positioned to investigate the previously demolished eastern wing of the prison and the former exercise yard to the north.

5.3.1 *Natural (Group 310 & 311)*

Undisturbed natural deposits were encountered and c1m BGL, c39.58m OD. The natural was a orange gravelly clay which in turn was topped by c100mm of grey sandy clay which appeared to be a buried topsoil, forming the earlier, pre-prison, ground surface. A small area of buried topsoil was visible within the yard area of Trench 3.

5.3.2 *Early Prison (Group 309)*

Within the yard area of Trench 3 the pre-prison landscaping deposit (c3005) was exposed. The landscaping deposit was c300mm thick brown sandy clay. Finds including pottery and some animal bone were recovered from this deposit; dating of the pottery was contemporaneous with construction of the original prison and the period just before. As discussed in 5.1.2 there is a substantial layer of pre-prison landscaping.

This was preserved because the modern wing sealed the archaeology of the exercise yard area and a number of early prison features.

Trench 3 contains the largest continuous section of the Early Quadrangle Wall (c3009) which makes up the eastern side of the early quadrangle prison (Plate 7). The wall mirrors the truncated remains of the same wall in Trench 1 and 2. This section of the wall also fully illustrates that at certain points the wall increases from 3 courses wide to 4 courses wide; this is possibly as a form of buttressing built into the wall due to its height with mark stain visible on the standing prison wing.

A land drain (c3014), aligned N-S has no physical relationship with the early quadrangle wall but it can be inferred, due to the drain rising as it nears the wall, that the drain extended into a surface drain related to the early prison wall.

A yard surface (c3012) was exposed on the western edge of Trench 3. The surface was c.50mm of compact grey mortar sealed by a <c.5mm layer of cinder, as illustrated in Figure 7. It is likely that the yard surface is from the early phases of the prison as it has been massively truncated by later 19th century services and construction.

5.3.3 *Construction of the Prison Wing and Exercise Yard (Group 305, 306 & 307)*

The original prison wing, visible on Captain Worsley's 1838 ground plan, dates from the prison expansion of the 1820s and is outside the extent of the trench. The prison wing walls exposed during excavation appear to be from an expansion in the 1840s, possibly visible on the 1849 ground plan and clearly defined on the 1870 plan. A few of the yard features are more difficult to date to this period; however, they truncate the early quadrangle prison thus aren't from the previous early prison phase.

The early quadrangle wall (c3009) has been truncated multiple times by services and later walls including a salt glazed drain service (c3013), a cast iron pipe (c3010), a culvert (c3011), and a 2 course wide wall (c3015). The wall (c3015) is possibly one of the early shed walls visible on the earlier ground plans (1849) and is probably contemporary with the prison wing expansion of the 1840s.

The prison wing has two large external walls, c2018 to the north and c2019 to the south. The south wall includes a purposeful gap of c.450mm towards its west end that formed part of an underground flue (c3021) that led to a central furnace area. The main internal walls were aligned NNW-SSE were c3026, c3025, c3027, and c3024, running from east to west, while c3028 was aligned WSW-ENE. Three of the internal wall, c3025, c3027 and c3028 also contain the purposeful gap for the underground flue though modern truncation makes its less clear in c3025 and c3027.

In the eastern section of the prison wing stood four single course thick dwarf walls (c3017). The walls appear to be the foundations for a raised flagstone floor. During excavation a large amount of broken flagstone was recovered from between the dwarf walls. Anecdotally this has parallels with the structural elements demolished in 2017.

A series of partition walls lay in the central area of the exposed wing. The flue (c3021) leads into this area and there is a large area of burning and cinders (c3020) at the 'end' of the flue. The walls c3029, c3030, c3031, c3032, c3033 vary in size from the 4 course wide c3033 to the single course thick c3031 and c3032. The purpose of the partitions is unknown besides their proximity with the possible furnace.

5.3.4 *Later Alterations (Group 303, 305 & 308)*

As mentioned above the early quadrangle wall was truncated by a cast iron pipe (c3010), the salt glazed drain (c3013) and the culvert (c3011). The cast iron pipe, running NE-SW across Trench 3, is a very late 19th century service alteration. The salt glazed drain, which runs diagonally across site from NW to SE, truncates the culvert. Salt glazed pipes were introduced in the late 1840s. The culvert (c3011), aligned NE-SW, truncates wall c3015 and is composed of a brick structure capped with flagstones (Plate 8). As yet there is no documentary evidence for this culvert. A small drain (c3023), diameter 150mm, located to the west side appears generally contemporary with the culvert. The culvert is possibly earlier but truncates the yard surface so is probably late 19th century.

There are number of diagonal dividing walls for the exercise yard area visible on the 1838, 1849 and 1852 ground plans. However, these do not appear to match the diagonal wall footing exposed during the excavation (c3008) as they do not extend outside the early quadrangle wall (c3009). The 1870 ground plan, however, appears to illustrate a diagonal wall in the correct position suggesting this was part of the prison expansions on the 1840s and 1850s.

The larger glazed drain (c3022) that feeds into the culvert was a later addition and the style of glaze even suggest an installation date towards the 20th century. It does prove that the culvert was in use for a large part of the 19th century.

A small floor repair (c3017) was made to the one of the dwarf wall at a point in the 19th century though the age of the repair is unknown.

5.3.5 *Earlier 20th Century Construction (Group 302 & 304)*

The yard features were demolished and a modern wing was built on the area during the first half of the 20th century (c3004) which sealed a majority of the archaeology underneath. Modernisation of the prison wing in the early 20th century likely caused the installation of a

drainage addition through the north wall and the blocking of the underground flue though there were use deposits into the 20th century (c3020).

The prison wing was demolished during an earlier demolition event (c3003) during the 20th century. It was likely removed in a similar period to the cookhouse and Smith House as all these buildings appear on the 1968 photo.

5.3.6 *Later 20th Century Construction/Demolition (Group 301)*

The modern wing remained standing until the final prison demolition in 2016-2017 (c3001). There was no further building on the early prison wing area post demolition; the most recent plans and photographs indicate the area was covered in tarmac and made an exercise area. Two manholes were installed (c3002) next to the southern wall of the modern wing.

5.3.7 *Modern Demolition (Group 300)*

Final demolition of the prison was completed from between October 2016 and June 2017 (c3000 and c3001).

5.4 **Trench 4 (Figure 8 and Plate 9)** 8mx9m. Northern half of Area 3 in the WSI.

This Trench was positioned over the previously demolished pump house. The area was separated from Trench 5, below, due to large amounts of disturbance between the trenches.

5.4.1 *Natural (Group 405 & 406)*

Undisturbed natural deposits were encountered within two deeper sondages dug to the north and west of Trench 4. at c1.5m BGL, c39.17m OD. The natural was a orange/brown clay which in turn was topped by c100mm of grey sandy clay which appeared to be a buried topsoil, forming the earlier, pre-prison, ground surface (Plate 10). While the buried soil was the same as that exposed in the other trenches, the deposit here was significantly more waterlogged to the point of appearing slightly blue-tinged.

5.4.2 *Archaeology Pre-dating 1783 (Group 404)*

The pre-prison landscaping deposit is visible to the east side of the Pump House as a dark grey/brown silty clay. The depth of the deposit, visible in the two deeper trenches excavated in this area to ascertain depth of natural, was up to c800mm. As discussed in 5.1.2 there is a substantial layer of pre-prison landscaping.

5.4.3 *Construction of the Pump House (Group 403)*

The Pump House first appears on 1849 general plan as an isolated building in the SE area of the prison. The majority of the Pump House appears to have been built in one phase of construction. On the 1870 ground plan the Pump House is illustrated as its own Treadmill and this is likely the reason for the 'cell' structure of the walls.

The Pump House, like the prison wing, appears to be part of one mid-19th century construction phase. The well (c4011) was probably the first feature built with the Pump House cells walls (c4008) built around it. The main external wall to the west (c4009) has been massively truncated to the north and is also composed of a mix of brick sizes with the lower course bricks being significantly smaller. This could be because the wall has been altered at a later date or earlier bricks have been co-opted from the early prison.

A cinder yard surface (c4012), likely contemporary with Pump House activity, was exposed outside the main Pump House structure to the east

5.4.4 *Earlier 20th Century Construction/Demolition (Group 402)*

During the early 20th century the well was capped with concrete (c4010) as the Pump House went out of use and was demolished (c3003). The workshops were then constructed upon this area but there are no visible remains of the modern buildings in the trench apart from a sump in the SE corner.

The modern sunken possible sump structure (c4004) was constructed to the SE of the Pump House. Largely unremarkable the structure did include a concrete foundation in its NW corner that contained a large number of discarded keys from the early 20th century period (Plates 11 and 12). Numerous explanations for this feature have come forward including a key amnesty, disposal and most likely pertains to a nationwide prison lock contract.

5.4.5 *Later 20th Century Construction (Group 401)*

The workshops stood until the demolition began in 2015 (c4001). A concrete sealed drain (c4002) was added at some point during the late 20th century and was aligned NW-SE, parallel with the now demolished workshops and Pump House.

5.4.6 *Modern Demolition (Group 400)*

Final demolition of the prison was completed from between October 2016 and June 2017 (c4000 and c4001).

5.5 **Trench 5 (Figure 9 and Plate 13)** 10mx25m. Southern half of Area 3 in the WSI.

This trench was located over the previously demolished treadmill. The area was separated from Trench 4, above, due to large amounts of disturbance between the trenches.

5.5.1 *Natural*

Undisturbed natural deposits were not encountered during the excavation of Trench 5.

5.5.2 *Archaeology Pre-dating 1852 treadmill (Group 509)*

Deposits dating from before the treadmill were only partially exposed, and not excavated in great detail. This was because of the significant depth of material encountered adjacent to the pump house immediately to the north (5.4.2); any investigation would have been beyond the scope of what was possible within the trench. Where the material was exposed it was similar in compaction, colour and composition to what was seen in Trench 4. Variations of this deposit (c1005, c2005, c3005, c4005,) were encountered across site and have been attributed to a landscaping event in preparation for the construction of the prison.

Within the construction backfill of one of the treadmill walls a single, intact, wire-cut land drain was recovered. This may have been purely residual material that was disturbed and deposited during the landscaping, or indicating deliberate drainage of the landscaped area prior to being developed. The form of this drain meant it was highly unlikely that it significantly pre-dated the 1852 construction of the treadmill. Truncating ground similar to what was seen in Trench 3.

5.5.3 *Construction of the Treadmill (Group 507 & 508)*

Though significantly truncated a large amount of the Treadmill structure still survived. Standing in the SE corner of the prison and, reputedly, the largest treadmill in the world at one point this particular treadmill building was constructed in 1852. Plans indicate that the building housed two treadmills on either side of central wall (Plates 14 and 15). An earlier treadmill dating from 1821 was possibly located where the female wing now stands

Three external walls from the treadmill were exposed to the south (c5014), east (c5009), and west (c5013). The northern wall was 5m outside the limit of excavation for Trench 5. The walls were composed of re-used sandstone that had been taken from other parts of the prison and also some worked pieces that were possibly from other significant buildings within Northallerton. The same sandstone was used as a component of the central wall (c5006) which also contained bricks.

On the original plans for the Treadmill the central wall divided the building into two with a treadmill parallel to it on either side, aligned NNW-SSE. This structure was supported by two partition walls; one to the east (c5007), that has been massively truncated, and one to the west (c5008). Between these walls and running across the central wall were a series of dividing walls (c5010, c5015, c5017, c5018, c5021, c5023, c5024, c5025, c5026, and c5031) aligned NE-SW at 3.3m intervals. On the early plans these were accurately marked on the original plans as at being at 10'10 intervals which divided the Treadmills into cells.

A stone capped drain (c5029) and drain channel (c5030) in the eastern external wall (c5009) are likely contemporary with the construction of the treadmill as c5030 is, much like the flue in trench 3, a purposeful gap built into the wall that was later sealed.

Most of what was exposed in Trench 5, as with the majority of the other Trenches, was below ground level. Modern ground level in Trench 5 pre-demolition was on average 40.80m AOD whereas the highest level within Trench 5 was 40.27m AOD, a difference of 500mm.

There were areas within Trench 5 that have been interpreted as original surviving ground level. These have survived because they were lower than surrounding ground levels as part of the treadmill structure. The first was an area of flagstone paving (c5016) in one of the cell areas which is probably the original base of the treadmill. A structure of brick and concrete also survived in the base of the southernmost cell which is possibly a spindle mount for the treadmill (c5022).

The other areas were external surfaces (c5029, c5034 and c5038) outside the eastern (c5009) and southern (c5014) walls. The surfaces, a compact cinder deposit, have been interpreted as being contemporary with construction and activity in the treadmill. The grain mill construction cut (c5035) truncates one of the surfaces (c5038).

5.5.4 *Later Alterations (Group 504, 505 & 506)*

Alterations and additions proposed on the 1870s plan of the treadmill may explain some of the alterations visible in the archaeological record within Trench 5, particularly the possible addition of the grain mill (c5035) which was connected to the south of the treadmill.

Construction of the grain mill may have caused the alterations to the toilet area, in the south of the treadmill, which has been significantly altered and disturbed (c5032, c5033 and c5042). Infilling and disturbance deposits internal and external of the treadmill indicate that the dividing walls (c5031 etc.) have been truncated in the later 19th century in the toilet area.

Some of the alterations visible on the 1870 ground plan, specifically the extension to the width of the treadmill to the east, were not seen in the archaeology exposed on site. It is possible that these alterations were visible outside of the limit of excavation; however, the areas that were exposed beyond the main eastern wall (c5009) included what was interpreted to be an external surface (c5029).

5.5.5 *Earlier 20th Century Construction (Group 502 & 503)*

The Prison Act of 1898 banned the use of particular types of hard labour within prison including treadmills but it took until 1902 for the practice to be completely abolished. The treadmill building itself appears to have survived into the 20th century but the internal features have been demolished and modified (c5004) and included the addition of a cast iron drain running across the centre of the treadmill towards a brick inspection chamber and truncated the aforementioned flagstone base (c5016).

During the internal demolition and modification of the treadmill the area between the central wall (c5006) and the east cell wall (c5009) was in filled with a mortar and rubble deposit (5012) which contained a large amount of redeposited metal finds. These appear to be contemporary with the entire use of the treadmill. As most of the site has been largely sterile in terms of finds this deposit is significant. It is likely that there were finds here due to the area not initially being part of the prison. The range of finds included slop bucket handles, metal cup and plates, buttons, and a pair of late 19th to early 20th century 'plug 8 variety' handcuffs.

5.5.6 *Later 20th Century Construction/Demolition (Group 501)*

The repurposed treadmill building was demolished in the later 20th century (c5003) and replaced with a larger modern building (c5002). This building is visible in the archaeology as the concrete stanchions, measuring approximately 3mx3m, that have massively truncated the treadmill walls c5014 and c5008. The stanchions sit at intervals of approximately 2m and are aligned NNW-SSE.

5.5.7 *Modern Demolition (Group 500)*

Final demolition of the prison was completed from between October 2016 and June 2017 (c5000 and c5001).

5.6 **Trench 6 (Figure 10 and Plate 16)** 7 to 9mx30m. Phase 2, July 2018. Located in the yard area between the Administration Block and the Isolation Wing, to the north of the Governor's House.

The area was chosen to investigate the Courthouse building demolished in the 1980s and the associated 'tunnel' myth. The trench exposed the entire length of the Courthouse and half its width.

5.6.1 *Natural (Group 613)*

Undisturbed natural deposits (c6016) were encountered at c1.0m BGL, between c39.96m OD. The natural was an orange gravely clay, consistent with what was encountered in Trenches 1, 2, 3 and 4.

5.6.2 *Archaeology Pre-dating 1783 (Group 612)*

A pre-prison make-up deposit (c6015) was visible along the southern section of Trench 6 and possibly between the internal courthouse walls. While the deposit might serve a similar purpose to the landscaping deposits encountered in the Trenches 1, 2, 3 and 4, the composition of the deposit is distinct from the other prison landscaping event. Within Trench 6 the pre-prison make-up, an orange clayey sand with gravel, resembles redeposited natural whereas the other trenches are silt deposits.

5.6.3 *Construction of the Courthouse (Groups 610 and 611)*

The Courthouse was constructed in the early 19th century, between 1800 and 1820, appearing on the first 1838 Ground Plan. Similar to the other prison buildings, such as the prison wing in Trench 3, the main external Courthouse wall (c6007) appears to have been constructed first, as a 'shell', with the internal walls (c6008, c6009, c6010, c6011, c6012 and c6028) constructed after. All the internal walls can be identified on both the 1838 plan and the 1870 ground plan apart from c6028 which has been removed by 1870. The walls were consistent in composition with brick dimensions of 240x110x55mm and bonded with lime mortar suggesting that though built separately it was within the same phase of construction (Plate 17).

Also encountered were features associated with the construction of the main courthouse wall. To the south of the wall and located at 8m intervals were a post pad (c6034) and two post holes (c6037 and c6039) which may have supported scaffolding.

Early external features associated with the Courthouse include two possible yard (c6014) or yard make-up surfaces (c6017) (Figure 11, Plate 18). The yard surfaces are similar to one encountered in Trench 3 and are likely contemporary. External structural features include a possible gatepost footing (c6035), which aligns with a mortar line visible on the Administration Block, and external step footing where the rear entrance to the Courthouse sits (c6038). Both the steps and gate are visible on the 1838 and 1870 ground plans.

5.6.4 *Mid-19th Century Courthouse Alterations (Groups 608 and 609)*

Alterations in the mid-19th century account for the change in layout in various areas of the Courthouse between the 1838 and 1870 ground plans. The majority of these alterations and additions occur in the cell area and the infill area between the Courthouse and what was the Women's prison and laundry on the 1838 plan. There was also the previously mentioned removal of wall c6028 in order to create a larger 'Visiting Justice's' room.

The cell area (Plate 19) is largely in the same layout that is illustrated on the 1870 Ground plan, including wooden floors (c6021 and c6043) and a staircase encountered as a stair footing with bottom steps *in situ* (c6022 and c6023). The staircase on the 1870 plan is L-shaped, bonded with the main courthouse wall c6007 and internal wall c6012. Though the staircase itself has been demolished along wall c6012 a small possible cupboard space under the stairs was exposed with small walls and an early concrete floor (c6026 and c6027).

The infill area has been highly truncated by 20th century building and services and is much harder to characterise. However, the small walls c6031 and c6032 are possible illustrated as a cupboard wall on the 1870 plan. The probable stair footing c6046 also aligns with a staircase visible in 1870. The recessed wall c6030 and c6041 might be the same wall as illustrated on the earlier 1838 plan but the composition of the wall appears to be much later, with larger bricks and more concrete.

5.6.5 *Later Alterations (Groups 606 and 607)*

Within the cell area were deposits that appear to post-date the 1870 Ground plan. This is primarily floor alterations where staircases appear to have been removed and replaced with wooden floors and a possible footing or cap. The alteration in the south of the cell area (c6044) is possibly associated with the alteration or removal of the L-shaped staircase. The wooden floor section (c6042 and stone footing (c6025) in the north of the cell area also possibly replace a staircase. The stone footing is comprised of re-used stone steps visible in c6023 suggesting a relationship between the two alterations (Plate 20).

Other structural additions that post-date the 1870 ground plan include the wall c6029 which may be an internal division added to the 'Visiting Justice's' room.

Late 19th century service additions include a brick and stone culvert (c6006) at the west end of the trench which was later replaced by ceramic drain c6005 as well as two slate sumps or soak-aways (c6036 and c6040). Both sumps include a cut into Courthouse wall c6007 to accommodate the downpipe though the cut for c6040 appears to have been recut with a modern drill and refilled with concrete at a later date. The sumps are comprised of reuse slate roof tiles with peg holes and some sandstone slabs (Plate 21).

5.6.6 *Early 20th Century Courthouse Construction (Groups 604 and 605)*

The 20th century saw some limited modernisation within the Courthouse building, primarily focused on the central holding cell area. A new cell was installed, bonded to walls c6009 and c6010 while truncating the wooden floors, composed of a poured concrete slab base (c6018) and cells walls composed of lining and engineering bricks (c6019). The walls sat upon the concrete slab with a layer of damp course between. Visible on the concrete slab were two divots, set c.1m apart, with metal staining that have been interpreted as pivot points of the cell gate or door.

Services also saw alteration in this period with the addition of two metal gas or water pipes (c6004) and a ceramic drain (c6005) in the western end of the trench. The downpipe for the ceramic drain has cut into main courthouse wall c6007.

5.6.7 *Late 20th Century Construction/Demolition (Groups 602 and 603)*

Evidence of the prisons military history was encountered in the eastern end of the Trench where an ammunition dump or cache was exposed (c6033). The nature and location of the ammunition suggests a post-war date, likely when the prison reverted to a civilian prison after being a military prison and depot throughout WWII.

The Courthouse was demolished during works in the 1980s to modernise the prison (c6003 and c6024). This phase of work also saw the demolition of the Cookhouse. After the Courthouse was removed temporary buildings were installed in the area with modern service runs (c6002) as well as a new tarmac surface (c6001).

5.6.8 *Modern Demolition and Investigations (Groups 600 and 601)*

Final demolition of the prison was completed from between October 2016 and June 2017. Geotechnical investigations in the area have occurred (c6013) in preparation for development.

6 DISCUSSION

The excavations revealed substantial remains for earlier prison buildings and structures in all trenches. With the expansive scale of the site the trench by trench review of the results above does not allow a more comprehensive overview of these findings. With this in mind the first part of this discussion section reviews the main chronological stages of the site.

Documentary evidence on the site, particularly from the County Archives, contains a huge wealth of information and detail. However, some caution has to be exercised because of the nature of what is available on the site. Much of the information, particularly plans and technical drawings, was for new structures or modification which were proposed, but not actually built.

Whilst work was underway on site, research running in tandem in the archives produced a number of very accurate drawings for what was being revealed. To a lesser extent it also produced a number of drawings for elements that clearly had not been constructed.

Natural (Phase 1)

Across the site natural deposits in the form of clays were encountered in most areas. There was a clear fall towards the southeast from Trench 1 to Trench 4, though nothing extreme for the distance between the two areas. Away from watercourses the local topography is clearly undulating.

A buried soil was also observed on top of the natural clays. Where this was seen it was entirely natural in origin and contained no cultural materials whatsoever. This dark silt deposit is possibly representative of the area being a swamp pre-prison, as per Saywell's description in 1885, when it was known as 'Priest's Garth' (Saywell, 1885).

The Early Prison (Phase 2)

It had been predicted (Compass Archaeology 2016) that there would low potential for any archaeological features which pre-dated the initial construction of the prison in the late 18th century. This prediction proved to be entirely correct in the areas investigated during these works.

The earliest material encountered across the site was a combination of dumping and clearly deliberate landscaping across the site. Excavations in Trench 6 indicate that that were possibly different stages or areas of landscaping across the site and not one consistent silty clay dumping deposit as exposed in the Trenches 1, 2, 3 and 4. Animal bone recovered indicated general waste disposal, with no specific function or origin.

Only a few elements of the early, quadrangle layout, prison were encountered during these works. These took the form of the inner curtain wall and were immediately recognisable due to the bricks being thinner than those for the bulk of what was seen across the rest of the site. Comparison of the archaeological results and the 1838 Ground Plan illustrate the areas of the curtain wall which were exposed (Figure 12). The heavily truncated remains of an exercise

yard surface were encountered as well and are likely contemporary with the early quadrangle prison.

19th Century Expansion (Phase 3 and 4)

Much of the prison was constructed during the 19th century. Several stages of expansion occurred with the prison buildings and structures, with further complication coming from structures being 'proposed' but not actually built

Prison Wings, Cookhouse & Smith Shop

The original 1820s prison wing buildings were outside of the excavations areas. The 1849 ground plan illustrates the expansion of the wing as well as the locations of the Cookhouse and Smith Shop as they originally stood. The 1849 plan is problematic however as there is two versions, the proposed and 'actual' ground plan, but there are buildings on the latter that were not constructed. When compared with the archaeology the results correspond with the construction in the 1840s, made necessary by overcrowding.

The Cookhouse was most accurately depicted in the 1870 ground plans which divided the building into sections which were visible in the exposed archaeology (Figure 13). The date of the chimney construction is unclear however due to plan discrepancies.

Brick typology of the cookhouse and prison wings showed they were largely contemporary mid-19th century construction. The areas were largely sterile of finds, likely due to the careful refuse disposal procedures in prisons. Carved stone was recovered from the dwarf wall area and was interpreted as possible internal features of the prison.

The Treadmill & Pumphouse

Modern construction had massively impacted upon both the Treadmill and Pumphouse buildings, but on both cases what did survive almost perfectly matched the drawings within the archives (Figure 13 and Plate 22). The Pumphouse was possibly built just before the middle of the century but discrepancies in proposed and actual plans in 1849 make this difficult to distinguish.

The original construction of the treadmill involved significant volumes of re-used sandstone in the foundations. This stone was initially unclear in origins, being possibly medieval or later. However, once larger sections were exposed and cleaned it was apparent that the material had been reclaimed from a post-medieval building, most probably the earlier elements of the prison itself.

It would not be wholly unreasonable to assume that as the prison, or components within, were being extended, demolished and rebuilt, that a 'builders yard' was created. This would have been used for the collection, cleaning and recycling of materials from earlier buildings so they could be re-purposed on site. Mapping from 1838 indicates a 'Lumber Yard' at the southern corner of the site

The Courthouse

The Courthouse was part of the Early Quadrangle prison and was constructed between 1800 and 1820. A majority of the external and internal walls remained as they were illustrated on the 1838 Ground Plan but a significant amount of alteration in the Cell area in the mid-19th century meant that the Courthouse bears more similarities to 1870 Ground Plan layout. The cell area, surviving due to being at a lower floor height, is indicative of the alterations and modernisations that would have been visible at floor level in the rest of the Courthouse and the prison beyond. Wall c6028, that only appears on the 1838 plan, and c6029, that does not appear on any of the ground plans are also illustrative of the usefulness and drawbacks in the prison plans. For wall c6028 its demolition can be identified to between 1838 and 1870 while wall c6029 is largely an unknown identity.

Later Building Alterations

As previously mentioned, the available archive material has both positives and negatives due to the lack of definition as to what was planned and what was actually constructed.

This was most obvious in regards to the Treadmill where the 1870 plans show an expansion out to the east that was not visible in the archaeology. There are also no definitive plans indicating the existence of the grain mill to the south beyond the proposal drawings (Plate 23). The excavation exposed the remains of a wall in the correct location but no other supporting archaeology. The lack of survival of the original prison ground level apart from in some areas within and around the treadmill has meant any deposits that could indicate the activity of an area have been removed and, as such in the case of the possible grain mill wall, nothing conclusive can be said about its use.

Earlier 20th Century Demolition & Construction (Phase 5)

Due to changing rules in regards to plans of prison around the turn of the century there are no detailed drawings of the prison in the first half of the century and, as such, it is difficult to determine what was constructed and demolished. The small amount of historical and archaeological record is also perhaps due to the closure of the prison in the 1920s due to falling crime rates.

Treadmills went out of use in the first few years of the 20th century after the banning of 'hard labour' punishments under the Prison Act of 1898 though the building containing the Northallerton treadmill remained standing and adopted a new purpose. The dumping within the treadmill of massive amounts of metal finds is perhaps associated with this change in use.

There is no evidence, anecdotally or through drawings and photos, of the demolition of the Pumphouse. It is likely to have fallen out of use with the treadmill as it contained a smaller version but, where the repurposed treadmill building is visible in photos from the latter half of the century, the Pumphouse had been replaced. When this occurred is unclear but when the subsequent building was constructed they disposed of the keys exposed within concrete in Trench 4.

Further modernisation of the Courthouse cell area occurred in the first half of the 20th century along with service improvements that possibly suggest a series of modernisation works in the Courthouse before the prison was closed in 1922.

Later 20th Century Demolition & Construction (Phase 6)

During the late 20th century the prison continued to be used and modified. The significance of these changes to the inmates and staff is beyond the scope of this project, whereas the material changes were easily identified.

The prison wing expansion and cookhouse were demolished in this period, though the more modern buildings that had been attached remained standing. The area of the cookhouse shows no evidence of being built on again and modern ground plans of the prison show an area for a road or route around the edge of the site. A plan produced by a prison guard between 1956 and the 1980s still includes the cookhouse so it can be assumed that the demolition of the buildings was very late in the 20th century (Figure 14). The plan, perhaps due to being an unofficial document, is not exact compared to the most recent topographic plan or the earlier plans. This is visible in the discrepancies between the archaeological results and the plan in Figure 12 but, nevertheless, it is a comprehensive illustration of which buildings were standing.

The areas in Trench 3 by the late 20th century had reversed their purpose; the prison wing had been demolished and replaced with a new exercise yard while the 19th century yard was replaced with a modern wing. At one point the modern and original prison wings stood concurrently, shown in the 1968 photograph (Plate 24) and clear in archaeology where the buildings respect each other.

As referred to above, the Treadmill building was repurposed and the Pumphouse demolished and replaced by a more modern building. The remains of the treadmill were eventually demolished in the late 20th century to create the workshop buildings, resulting in the concrete stanchions that have truncated the archaeology in Trench 5 so consistently.

Trench 6 is the only intervention to have encountered archaeological evidence of the period the site spent as a military depot and military prison with the discovery of ammunition cache/dump. The nature of its location (within the infill area between the Courthouse and the now Isolation wing) suggest it dates to immediately after the prison reverted to civilian prisoners, around 1950, and the disposal was hurried.

Modern Demolition (Phase 7)

The latest activities on the site culminated in the works of the demolition team. Demolition of the standing buildings and removal of solid surfaces had a relatively low impact, primarily due to the specification limiting the work so that deeper excavation did not take place.

In summary the majority of the archaeological material exposed during excavation was part of two main phases of construction during the early and late 19th century. The earlier building phase was concentrated primarily around the area that the original prison inhabited, at once respecting and incorporating the early quadrangle prison before expanding into the crucifix shape in the late 1840s (Figure 15). The second major phase of construction in the latter half

of the 19th century reflected the crucifix expansion to the south and involved the construction of the Pumphouse and the Treadmill in the southeast (Figure 16).

Northallerton Prison, since its inception, is in many ways a typical example of prisons in England architecturally. This can be seen through the archaeology, standing buildings and historical resources available. The prison naturally expanded and altered to reflect the needs of the prison population, initially due to overcrowding but eventually due to the changing needs of the government, including reopening to become a military prison in the 1940s and more recently a young offender's institute.

Both stages of excavation proved to be a success both archaeologically and with the public. Following on from previous experience of excavation and public engagement in Northallerton at Rutson Hospital, an expansion in community engagement was possible resulting in open days, workshops, tours and excavation opportunities. Of particular significance was the success of the outreach to groups with disabilities including an onsite session with RNIB (Royal National Institute for Blind People) and Sparks.

This was a great success for YAT and Hambleton District Council, aiding in a Heritage Lottery funding proposal. It also provided more information on the prison for the people of Northallerton who requested archaeological investigation of the prison during the Rutson Hospital excavation. It was also a positive opportunity to introduce councillors, public and developers that visited to the processes of archaeology.

REFERENCES

- British Geological Survey. www.bgs.ac.uk. Accessed 06/11/17.
- Compass Archaeology, 2016. *HMPYOI Northallerton, East Road, Northallerton, North Yorkshire, DL6 1NW: An Archaeological Desk-based Assessment*
- Cross, Rupert. 1971. *Punishment, Prison and the Public: An Assessment of Penal Reform in Twentieth Century England by an Armchair Penologist*. Stevens & Sons. London
- Captain Worsley. 1838. *Prison at Northallerton Ground Plan*.
- Captain Worsley. 1849. *Sheet No.15 General Plan*.
- Captain Worsley. 1849. *Sheet No.4: Northallerton Proposed Additions to the House of Correction Ground Floor*.
- Creighton, Robert. 1835. *Map of North Allerton for Samuel Lewis's Topographical Dictionary*.
- Davies, J. et al. 2002. *English Prisons: An Architectural History*. English Heritage.
- France Richard. 1852. *Plan of Northallerton Public Health*.
- Captain Worsley. 1870. *Northallerton Prison Ground Plan*.
1870. *N.R. House of Correction Northallerton*.
- Historic England. *Northallerton Prison Quadrangle (NHLE entry 1418378)*. <https://historicengland.org.uk/listing/the-list/list-entry/1418378>. Accessed 06/11/17.
- Historic England. *Female Cell Bloc (NHLE entry 1418864)*. <https://historicengland.org.uk/listing/the-list/list-entry/1418864>. Accessed 06/11/17.
- Ingledeu, C.D.J. 1858. *The history and antiquities of North Allerton, in the county of York* London: Bell & Daldy
- Kelly, George Henry. 1956-1980s. *Plan of HM Northallerton Prison*
- Kendall, T, Rimmer, J. 2016. *Archaeological Investigations at Rutson Hospital, Northallerton, North Yorkshire: Building Recording, Excavation & Watching Brief Report*. YAT 2016/18.
- Riordan, M. 1996. *Northallerton*. Stroud, Sutton Publishing.
- Saywell, J. L. 1885. *The History and Annals of Northallerton, Yorkshire*. Simpkin, Marshall & Co.
- Taylor-Wilson, R. 2000. *An Archaeological Evaluation at East Road Northallerton, N. Yorkshire*. Pre-Construct Archaeology. Lincoln.
- Weightman, P. 2016. *Yorkshire and its origins*.

ACKNOWLEDGEMENTS

Many thanks to the following people and organisations:

- Helen Kemp, Ally Thompson, Bridget Fortune, Clive Thornton, Cllr Peter Wilkinson and the rest of Hambleton District Council
- Volunteers for the Open Days
- John Parkinson and the rest of the Northallerton History Society
- David Dodwell for his aerial photography
- YAT Community Engagement Manager Jen Jackson
- The excavation team Emma Boast, Gus Shaw, Paul Howlett, George Loffman, Tom Coates and Becky Wilson
- And finally everyone who visited and took part in the excavation

APPENDIX 1 – INDEX TO ARCHIVE

Item	Number of items
Context sheets	178
Levels register	1
Photographic register	3
Sample register	n/a
Drawing register	n/a
Original drawings	48 sheets
B/W photographs (films/contact sheets)	3 films
Colour slides (films)	n/a
Digital photographs	587
Written Scheme of Investigation	1
Report	2

Table 3 Index to Archive

APPENDIX 2 – CONTEXT LIST

Table 4 Context List

Area	Context	Group	Set	Phase	Description
1	1000	100	1000	7	Deposit. Unstratified/machining. Same as c2000, c3000, c4000, c5000.
1	1001	100	1000	7	Deposit. Modern Demolition. Same as c2002, c3001, c4001, c5001.
1	1002	101	1001	6	Deposit. Latest Building Elements.
1	1003	101	1001	6	Deposit. Older Demolition
1	1004	102	1002	5	Deposit. Earlier 20 th Century Building Elements.
1	1005	106	1013	2	Deposit. Landscaping for original prison. Friable, orangish brown, silty sand. Frequent CBM fragments, stones and charcoal flecks. 18 th century. Same as c2005, c3005, c4005, c5005.
1	1006	107	1014	1	Deposit. Buried Ground Surface. Firm, dark greyish brown, sandy clay. Moderate charcoal flecks and pebbles. Same as c2006, c3006, c4006.
1	1007	108	1015	1	Deposit. Natural. Firm, orangish brown, clay. Moderate gravel and pebbles. Same as c2007, c3007, c4007.
1	1008	103	1006	5	Deposit. Salt-glazed ceramic drain. Visible to 920x230mm. Backfill: friable, light greyish brown, sand silt. Frequent CBM fragments and small stones. Late 19 th /early 20 th century.
1	1009	103	1007	5	Deposit. Glazed tile gutter. No bonding material. 240x160x20mm to 170x60x80mm. Late 19 th /early 20 th century.
1	1010	103	1005	5	Deposit. Small cast iron pipe. 400x40mm. Truncates wall c1012 and flue c1017. Late 19 th century.
1	1011	103	1004	5	Deposit. Large cast iron pipe. 940x60mm. Late 19 th century.
1	1012	105	1010	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 230x120x70mm. English Bond. Pale grey concrete mortar. 19 th century Cookhouse main external west wall. Same as c2008.
1	1013	106	1013	2	Deposit. Brick Wall. Aligned NNW-SSE. Handmade bricks 230x110x60mm. Flemish? bond. Pale pinkish grey mortar. Bonded into c1015. Early quadrangle prison wall. 18 th /19 th century. Similar to c3009. Same as c2014.
1	1014	105	1011	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x120x70mm. English bond. Pale grey concrete mortar. Internal Cookhouse and Prison Wing wall. 19 th century.
1	1015	105	1012	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 220x100x100mm. Course of Chamfer bricks 220x90x100mm. English bond. Pale grey mortar. Internal Prison Wing wall. 19 th century.
1	1016	104	1009	4	Deposit. Stone-based duct/channel. Aligned NNW-SSE. Disturbed flagstones 220x160x20mm to 500x300x30mm. Rough brick structure to SSE end attached to c1014. Handmade bricks 240x110x70mm. 19 th century Cookhouse feature. Same as c2016.
1	1017	104	1008	4	Deposit. Stone-based flue and brick wall. Aligned NNW-SSE. Flagstones 270x230mm to 480x400mm. Handmade bricks. Parallel to west wall c1012. 19 th century Cookhouse feature. Same as c2009.
1	1018	104	1003	4	Deposit. Brick wall. Aligned NNW-SSE to ENE-WSW. Handmade bricks 240x100x80mm. Course of Chamfer bricks 100x80x120mm. Pale grey mortar. Prison wing partition wall. 19 th century.
1	1019	104	1003	4	Deposit. Flagstone floor. Flagstones 680x660x20mm to 240x180x20mm. Well worn and damaged in antiquity. 19 th century prison wing feature.
1	1020	104	1003	4	Deposit. Brick wall stub. Handmade bricks 200x100x50mm. Pale grey mortar. 19 th century prison wing feature.
2	2000	200	2000	7	Deposit. Unstratified/machining. Same as c1000, c3000, c4000, c5000.
2	2001	200	2000	7	Deposit. Modern Demolition. Same as c1002, c3001, c4001, c5001.
2	2002	201	2001	6	Deposit. Latest Building Elements.

Area	Context	Group	Set	Phase	Description
2	2003	201	2001	6	Deposit. Older Demolition
2	2004	202	2002	5	Deposit. Earlier 20 th Century Building Elements.
2	2005	207	2013	2	Deposit. Landscaping for original prison. Friable, orangish brown, silty sand. Frequent CBM fragments, stones and charcoal flecks. 18 th century. Same as c1005, c3005, c4005, c5005.
2	2006	208	2014	1	Deposit. Buried Ground Surface. Firm, dark greyish brown, sandy clay. Moderate charcoal flecks and pebbles. Same as c1006, c3006, c4006.
2	2007	209	2015	1	Deposit. Natural. Firm, orangish brown, clay. Moderate gravel and pebbles. Same as c1007, c3007, c4007.
2	2008	206	2012	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 230x120x70mm. English Bond. Pale grey concrete mortar. 19 th century Cookhouse main external west wall. Same as c1012.
2	2009	204	2009	4	Deposit. Stone-based flue and brick wall. Aligned NNW-SSE. Flagstones 270x230mm to 480x400mm. Handmade bricks. Parallel to west wall c1012. Wall truncated and flagstones widened towards SSE end. 19 th century Cookhouse feature. Same as c1017.
2	2010	204	2005	4	Deposit. Boiler brick footing. Handmade bricks 230x110x70mm. Pale grey mortar. Large sandstone flag set into top 900x440x50mm along with two stone flues c2011. Overall dimensions 4x4m. 19 th century Cookhouse feature.
2	2011	203	2003	6	Deposit. Boiler use deposits. Aligned NNW-SSE. Friable, dark greyish black, cinder. 19 th century Cookhouse feature.
2	2012	205	2010	3	Deposit. Chimney brick footing. Handmade bricks 230x110x70mm. Pale grey mortar. Sat on 1m deep concrete foundation. Overall dimensions 4.0x4.0x1.1m. 19 th century Cookhouse feature.
2	2013	206	2011	3	Deposit. Aligned ENE-WSW. Brick wall. Handmade bricks 220x110x70mm. Pale pinkish grey mortar. Early 19 th century Smith's Shop wall.
2	2014	207	2013	2	Deposit. Brick Wall. Aligned NNW-SSE. Handmade bricks 230x110x60mm. Flemish? bond. Pale pinkish grey mortar. Early quadrangle prison wall. 18 th /19 th century. Truncated by c2013. Similar to c3009. Same as c1013.
2	2015	205	2006	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 230x110x80mm. Pale grey mortar. 19 th century oven wall within Cookhouse.
2	2016	204	2004	4	Deposit. Stone-based duct/channel. Aligned NNW-SSE. Disturbed flagstones 220x160x20mm to 500x300x30mm. 19 th century Cookhouse feature. Same as c1016.
2	2017	204	2007	4	Deposit. Bricks wall. Aligned NNW-SSE. Handmade bricks 240x110x80mm. Pale grey mortar. 19 th century Cookhouse partition wall.
2	2018	204	2008	4	Deposit. Bricks wall. Aligned ENE-WSW. Handmade bricks 240x110x80mm. Pale grey mortar. 19 th century Cookhouse partition wall.
3	3000	300	3000	7	Deposit. Unstratified/machining. Same as c1000, c1000, c4000, c5000.
3	3001	300	3000	7	Deposit. Modern Demolition. Same as c1002, c2001, c4001, c5001.
3	3002	301	3001	6	Deposit. Latest Building Elements.
3	3003	301	3001	6	Deposit. Older Demolition
3	3004	302	3002	5	Deposit. Earlier 20 th Century Building Elements and demolition.
3	3005	309	3014	2	Deposit. Landscaping for original prison. Friable, orangish brown, silty sand. Frequent CBM fragments, stones and charcoal flecks. 18 th century. Same as c1005, c2005, c4005, c5005.
3	3006	310	3015	1	Deposit. Buried Ground Surface. Firm, dark greyish brown, sandy clay. Moderate charcoal flecks and pebbles. Same as c1006, c1006, c4006.
3	3007	311	3016	1	Deposit. Natural. Firm, orangish brown, clay. Moderate gravel and pebbles. Same as c1007, c2007, c4007.

Area	Context	Group	Set	Phase	Description
3	3008	305	3009	3	Deposit. Brick wall. Aligned NW-SE. Handmade bricks 240x120x80mm. Concrete foundation. Exercise yard diagonal dividing wall. Late 19 th century feature.
3	3009	309	3013	2	Deposit. Brick Wall. Aligned NNW-SSE. Handmade bricks 230x110x60mm. Flemish? bond. Pale pinkish grey mortar. Early quadrangle prison wall. 18 th /19 th century. Truncated by c3010, c3011, c3013, c3015. Similar to c1013, c2014.
3	3010	303	3005	4	Deposit. Cast iron pipe run. Aligned ENE-WSW across trench. 100mm diameter.
3	3011	305	3008	3	Deposit. Stone-capped brick culvert. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Flagstones 750x450-500x70mm. Pale grey mortar. Organic fill at base: Soft, dark brownish grey, silt. 19 th century yard feature.
3	3012	309	3011	2	Deposit. Yard surface. Compact, light brownish grey, mortar sealed by thin layer of cinder. Truncated by c3013. Early 19 th century prison yard feature.
3	3013	305	3006	3	Deposit. Large drain. Salt glazed ceramic pipe 150mm diameter. Backfill: Friable, greyish brown, clayey silt. Frequent CBM, mortar fragments and stones. Late 19 th century feature.
3	3014	309	3012	2	Deposit. Land drain. Aligned N-S. 140mm diameter. Early 19 th century yard feature.
3	3015	307	3010	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. 19 th century yard feature.
3	3016	306	3021	3	Deposit. Brick walls. Aligned NNE-SSW. Handmade bricks 240x120x80mm. Pale grey mortar. Dwarf walls for sprung floor within Prison wing. Early 19 th century.
3	3017	308	3004	4	Deposit. Brick wall repair. Handmade bricks 240x120x80mm. Dark grey mortar. Repair for dwarf wall within prison wing. 19 th century.
3	3018	306	3018	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 240x120x80mm. Pale grey mortar. Concrete foundation. North wall of prison wing. Early 19 th century.
3	3019	306	3017	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 240x120x80mm. Pale grey mortar. Purposeful gap for flue near west end. South wall of prison wing. Early 19 th century.
3	3020	304	3003	5	Deposit. Burning deposit. Friable, dark brownish grey/black, silty sand/charcoal. Frequent CBM, mortar and sandstone fragments. Related to the underground flue c3021. Early 19 th century prison wing feature.
3	3021	306	3017	5	Deposit. Underground Flue. Visible as a purpose-built 500mm gap in walls c3019, c3027, c3028, c3025. Infilled with rubble. Related to burning deposit c3020. Early 19 th century prison wing feature.
3	3022	303	3007	4	Deposit. Large glazed ceramic pipe in culvert. 200mm diameter. Late 19 th /early 20 th century yard feature.
3	3023	305	3008	3	Deposit. Small ceramic drain pipe in culvert. 150mm diameter. 19 th century yard feature.
3	3024	306	3020	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x120x80mm. Pale grey mortar. Possible truncation or purpose-built gap. Major internal wall. Early 19 th century prison wing.
3	3025	306	3020	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x120x80mm. Pale grey mortar. Purpose-built gap for flue c3021. Truncated by modern services. Major internal wall. Early 19 th century prison wing.
3	3026	306	3020	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x120x80. Pale grey mortar. Major internal wall. Early 19 th century prison wing.
3	3027	306	3022	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x120x80mm. Pale grey mortar. Purpose-built gap for flue c3021. Truncated by modern services. Major internal wall. Early 19 th century prison wing.

Area	Context	Group	Set	Phase	Description
3	3028	306	3022	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 240x120x80mm. Pale grey mortar. Purpose-built gap for flue c3021. Major internal wall. Early 19 th century prison wing.
3	3029	306	3023	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 240x100x80mm. Dark grey mortar. Partition wall possibly related to flue c3021. Early 19 th century prison wing.
3	3030	306	3023	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x110x60mm. Dark grey mortar. Partition wall possibly related to flue c3021. Early 19 th century prison wing.
3	3031	306	3019	3	Deposit. Brick wall. Aligned NW-SE. Handmade bricks 230x110x70mm. Pinkish grey mortar. Partition wall possibly related to c3032. Early 19 th century prison wing.
3	3032	306	3019	3	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 230x110x70mm. Pinkish grey mortar. Partition wall possibly related to c3031. Early 19 th century prison wing.
3	3033	306	3022	3	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 240x100x80mm. Pinkish grey mortar. Partition wall possibly related to flue c3021 and walls c3031 and c3032. Early 19 th century prison wing.
4	4000	400	4000	7	Deposit. Unstratified/machining. Same as c1000, c2000, c3000, c5000.
4	4001	400	4000	7	Deposit. Modern Demolition. Same as c1002, c2001, c3001, c5001.
4	4002	401	4001	6	Deposit. Latest Building Elements.
4	4003	402	4002	5	Deposit. Older Demolition
4	4004	402	4002	5	Deposit. Earlier 20 th Century Building Elements.
4	4005	404	4007	2	Deposit. Landscaping for original prison. Friable, orangish brown, silty sand. Frequent CBM fragments, stones and charcoal flecks. 18 th century. Same as c1005, c2005, c3005, c5005.
4	4006	405	4008	1	Deposit. Buried Ground Surface. Firm, dark greyish brown, sandy clay. Moderate charcoal flecks and pebbles. Same as c1006, c2006, c3006.
4	4007	406	4009	1	Deposit. Natural. Firm, orangish brown, clay. Moderate gravel and pebbles. Same as c1007, c2007, c3007.
4	4008	403	4005	4	Deposit. Brick walls. Mixed alignment. Handmade bricks 220x110x70mm. Pale grey mortar. Main cell walls of Pump House building. 19 th century.
4	4009	403	4006	4	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 240x120x90. Lower course of bricks smaller 230x100x55mm. Pale grey mortar. Main west wall of Pump House. 19 th century.
4	4010	402	4002	5	Deposit. Concrete capping for well. Compact, pale grey, concrete. Late 19 th century/early 20 th century.
4	4011	403	4004	4	Deposit. Brick structure. Handmade bricks 220x120mm. Pale grey mortar. Brick well structure. 19 th century Pump House.
4	4012	403	4003	4	Deposit. Burnt make-up. Friable to loose, dark brownish black, silty charcoal and ash. Occasional CBM and mortar flecks. 19 th century use deposit outside Pump House.
4	4013	403	4005	4	Deposit. Brick structure. Handmade bricks 220x110x70mm. Pale grey mortar. Possible buttress for Pump House walls. Late 19 th century.
5	5000	500	5000	7	Deposit. Unstratified/machining. Same as c1000, c2000, c3000, c4000.
5	5001	500	5000	7	Deposit. Modern Demolition. Same as c1001, c2002, c3001, c4001.
5	5002	501	5001	6	Deposit. Latest Building Elements.
5	5003	501	5001	6	Deposit. Older Demolition
5	5004	502	5002	5	Deposit. Earlier 20 th Century building modifications.
5	5005	509	5018	2	Deposit. Landscaping for original prison. Friable, orangish brown, silty sand. Frequent CBM fragments, stones and charcoal flecks. 18 th century. Same as c1005, c2005 c3005, c4005.

Area	Context	Group	Set	Phase	Description
5	5006	508	5019	4	Deposit. Brick and sandstone wall. Aligned NNW-SSE. Handmade bricks 230x110x80mm. Machine cut sandstone up to 400x260x150mm. Pale pinkish grey mortar. Concrete foundation. 19 th century central Treadmill wall.
5	5007	508	5010	4	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 220x110x65mm. Pale grey mortar. Mortar foundation. 19 th century Treadmill west cell wall.
5	5008	508	5011	4	Deposit. Brick wall. Aligned NNW-SSE. Handmade bricks 200-300x110x60-70mm. Pale pinkish grey mortar. Highly truncated by concrete stanchions 5002. 19 th century Treadmill east cell wall.
5	5009	508	5020	4	Deposit. Sandstone wall. Aligned NNW-SSE. Machine cut and reused sandstone up to 400x260x150mm. Pale pinkish grey mortar. Highly truncated by concrete station 5002. 19 th century external east Treadmill wall.
5	5010	508	5028	4	Deposit. Brick wall stub. Aligned ENE-WSW. Handmade bricks 220x110x70mm. Pale pinkish grey mortar. 19 th century Treadmill dividing cell wall.
5	5011	508	5010	4	Cut. Construction cut. Aligned NNW-SSE. 200mm wide. 19 th century Treadmill west cell wall. Not excavated.
5	5012	503	5005	5	Deposit. Rubble/refuse backfill. Loose, pale pinkish grey, mortar. Frequent CBM. Frequent metal finds including buckets, cups, button and a pair of manacles. Late 19 th century/early 20 th century post-treadmill deposit.
5	5013	508	5021	4	Deposit. Sandstone wall. Aligned NNW-SSE. Machine cut and reused sandstone up to 400x260x150mm. Pale pinkish grey mortar. Highly truncated by concrete station 5002. 19 th century external west Treadmill wall.
5	5014	508	5022	4	Deposit. Sandstone wall. Aligned ENE-WSW. Machine cut and reused sandstone up to 400x260x150mm. Pale pinkish grey mortar. Highly truncated by concrete station 5002. 19 th century external south Treadmill wall.
5	5015	508	5026	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale pinkish grey mortar. 19 th century Treadmill dividing cell wall.
5	5016	508	5015	4	Deposit. Flagstone floor. Sandstone flags 470x360x20mm-970x500x20mm. Pale pinkish grey mortar. Possibly bedded on sand (5042). 19 th century Treadmill floor.
5	5017	508	5025	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale pinkish grey mortar. 19 th century Treadmill dividing cell wall.
5	5018	508	5029	4	Deposit. Brick wall stub. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale pinkish grey mortar. 19 th century Treadmill dividing cell wall.
5	5019	507	5012	4	Deposit. Surface. Firm, mottled brown and grey, silt and mortar. Lenses of burnt material. Frequent CBM and charcoal flecks. Occasional small stones. 19 th century external Treadmill surface. Same as 5034.
5	5020	503	5004	5	Deposit. Redeposited natural. Firm, dark grey, clay. Moderate gravel. Late 19 th century/early 20 th century deposit. Post-treadmill.
5	5021	508	5027	4	Deposit. Brick wall stub. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale pinkish grey mortar. 19 th century Treadmill dividing cell wall or pier.
5	5022	508	5017	4	Deposit. Brick and concrete spindle mount. Handmade 230x110x70mm. Pale grey mortar. Two concrete blocks 730x380x30mm. 19 th century Treadmill machinery.
5	5023	508	5023	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. 19 th century dividing cell wall. Treadmill toilet area
5	5024	508	5023	4	Deposit. Brick wall stub. Aligned NNW-SSE. Handmade bricks 230x120x70mm. Pale grey mortar. Truncated by disturbance 5032. 19 th century dividing wall. Treadmill toilet area.

Area	Context	Group	Set	Phase	Description
5	5025	508	5030	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. 19 th century dividing cell wall. Treadmill toilet area.
5	5026	508	5024	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. 19 th century Treadmill dividing cell wall.
5	5027	503	5003	5	Deposit. Infilling/redeposited natural. Firm, greyish orange/brown, silty clay. Frequent stones, mortar lenses. Moderate red clay lenses and CBM fragments. Late 19 th century/early 20 th century. Post-treadmill.
5	5028	503	5003	5	Deposit. Infilling/redeposited natural. Firm, greyish orange/brown, silty clay. Frequent stones, mortar lenses. Moderate red clay lenses and CBM fragments. Late 19 th century/early 20 th century. Post-treadmill.
5	5029	508	5016	4	Deposit. Stone and brick drain. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Sandstone flags 690x380x60mm-700x420x60mm. No bonding material. Late 19 th century treadmill drainage/service alteration.
5	5030	508	5016	4	Cut. Drainage/service channel. Aligned ENE-WSW. Truncating sandstone blocks in wall 5009. 120mm wide, 230mm deep. Late 19 th century drainage/service alteration.
5	5031	508	5031	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. Truncated by disturbance 3032. 19 th century dividing wall. Treadmill toilet area.
5	5032	505	5007	4	Deposit. Disturbance. Firm, light greyish brown, sandy mortar/silt. Frequent CBM and mortar. Occasional sandstone fragments. Concentration of cobbles to south end. Late 19 th century Treadmill toilet alterations.
5	5033	505	5007	4	Deposit. Makeup/ infilling. Firm, orangish brown, gritty silt. Frequent CBM fragments, small pebbles, charcoal flecks and mortar fragments. Late 19 th century/ early 20 th century toilet area. Post-treadmill.
5	5034	504	5006	4	Deposit. Surface. Firm to compact, dark brownish grey, cinder/burnt clay/sandy silt. Frequent small stones, CMB fragments and charcoal flecks. 19 th century external Treadmill surface. Same as 5019.
5	5035	506	5009	4	Deposit. Brick wall. Aligned ENE-WSW. Handmade bricks 230x110x70mm. Pale grey mortar. Highly truncated by concrete stanchions 5002. South of treadmill. Possibly late 19 th century grain mill wall.
5	5036	506	5009	4	Deposit. Construction backfill. Loose, dark greyish brown, silty clay. Frequent CBM fragments, mortar and charcoal flecks. Possibly late 19 th century grain mill wall.
5	5037	506	5009	4	Cut. Construction cut. Aligned ENE-WSW. 380mm wide, 200mm deep. Possibly late 19 th century grain mill wall. Partially excavated.
5	5038	507	5012	4	Deposit. Surface. Firm, dark grey, silty cinder sealing firm, pale grey mortar substrate. Frequent CBM flecks. Moderate slate fragments. Truncated by 5037. Possible 19 th century external treadmill surface.
5	5039	507	5013	4	Deposit. Makeup/infilling. Firm, orangish brown/black, clay and cinder. Occasional charcoal flecks and burnt clay. Truncated by 5037. 19 th century external treadmill infilling.
5	5040	508	5010	4	Deposit. Construction backfill. Firm, mottled dark greyish brown, gritty clay. Occasional small stones and charcoal flecks. 19 th century Treadmill west cell wall.
5	5041	508	5014	4	Deposit. Bedding material. Loose, yellow, sand. Probable bedding material for removed flagstone floors at base of treadmill cells. 19 th century.
5	5042	505	5008	4	Deposit. Rubble infilling. Friable, pale greyish brown, silty mortar. Frequent CBM fragments and stones. Infilling during toilet area alterations. Late 19 th century.

Area	Context	Group	Set	Phase	Description
6	6000	600	6000	7	Deposit. Unstratified/machining.
6	6001	602	6002	6	Deposit. Tarmac yard surface.
6	6002	602	6002	6	Deposit. Footings and services for modern temporary buildings.
6	6003	603	6003	6	Deposit. 1980s Demolition.
6	6004	605	6005	5	Deposit. Two metal gas/ water services.
6	6005	605	6006	5	Deposit. Ceramic and concrete drain.
6	6006	607	6028	4	Deposit. Brick culvert. Aligned NW/SE. Handmade bricks 240x110x60mm. Pale grey mortar. Sandstone base and capping. 380mm wide. Late 19 th century.
6	6007	611	6030	3	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century main Courthouse wall.
6	6008	611	6029	3	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Witness room/Bridgemasters office.
6	6009	611	6029	3	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Bridgemasters office/cell area.
6	6010	611	6021	3	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Passageway/cell area.
6	6011	611	6022	3	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Passageway.
6	6012	611	6020	3	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Cell area/Visiting Justice's room.
6	6013	601	6001	7	Deposit. Geotechnical Test Pit.
6	6014	610	6023	3	Deposit. Yard Surface. Compact, light grey, cement mortar with a compacted 10mm crust. Frequent pebbles and moderate charcoal flecks. Early 19 th century external Courthouse feature.
6	6015	612	6032	2	Deposit. Landscaping/makeup pre-prison. Friable, brownish orange, pebbly clay sand. 18 th century or earlier.
6	6016	613	6033	1	Deposit. Natural. Firm to friable, slightly brownish pinky orange, pebbly clayey sand. Moderate cobbles and occasional sand patches.
6	6017	610	6024	3	Deposit. Surface makeup. Soft/loose, yellowish brown, sand with stone below. Early 19 th century external Courthouse feature.
6	6018	605	6007	5	Deposit. Concrete slab. 20 th century cell room adaptation.
6	6019	605	6007	5	Deposit. Brick wall. Lining and engineering bricks 225x105x75mm. Concrete mortar. Green paint. 20 th century cell room adaptation.
6	6020	605	6007	5	Deposit. Gate pivot points. Two divots in concrete slab c6018. 500mm gap. Metal staining around and between points. 20 th century cell room adaptation.
6	6021	608	6013	4	Deposit. Wooden floor. Sprung 6" oak floorboards. Mid-19 th century cell room feature.
6	6022	608	6015	4	Deposit. Stair footing. Handmade bricks 240x110x55mm. Light grey lime mortar. Mid-19 th century cell room feature.
6	6023	608	6015	4	Deposit. Stone steps. Worked stone block, cracked through centre. 800x400mm. Mid-19 th century cell room feature.
6	6024	603	6003	6	Deposit. 1980s cell room demolition.
6	6025	606	6011	4	Deposit. Capping/footing. Reused stone steps 670-930x150x370mm. Capping blocks 540x330mm. Light grey cement. Late 19 th century cell room floor alteration.
6	6026	608	6014	4	Deposit. Brick wall. Aligned NE/SW and NW/SE. Handmade bricks 230x110x60mm. Light grey mortar. Mid-19 th century cell room feature (cupboard under stairs).
6	6027	608	6014	4	Deposit. Concrete floor. 1.71x0.8m. 20-30mm thickness. Mid-19 th century cell room feature (cupboard under stairs).

Area	Context	Group	Set	Phase	Description
6	6028	611	6025	3	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 240x110x55mm. Light yellow/grey lime mortar. Early 19 th century internal Courthouse wall. Demolished for larger Visiting Justice's room.
6	6029	606	6008	4	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 230-240x120x60mm. Grey lime mortar. Late 19 th century internal Courthouse wall. Partition wall in Visiting Justices' room.
6	6030	609	6018	4	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 240x110x50mm. Grey mortar. Mid-19 th century infill wall between Courthouse and Isolation wing. Same as c6041.
6	6031	609	6016	4	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 230x60mm. Grey mortar. Mid-19 th century infill wall between the Courthouse and Isolation wing.
6	6032	609	6017	4	Deposit. Brick wall. Aligned NW/SE. Handmade bricks 230x110x60mm. Mid-19 th century infill wall between the Courthouse and Isolation wing.
6	6033	604	6004	6	Deposit. Ammunition cache/dump. Cache of 303 and 9mm rounds/bullets. Possibly within a box. Mid-20 th century.
6	6034	611	6031	3	Deposit. Post pad. Handmade bricks 230x110x60mm. Light grey mortar. Early 19 th century construction feature.
6	6035	610	6026	3	Deposit. Gatepost footing. 400x300mm. Early 19 th century external Courthouse feature.
6	6036	607	6010	4	Deposit. Slate sump/soak-away. 2.75x1.22m. Late 19 th century Courthouse drainage feature.
6	6037	611	6031	3	Deposit. Posthole. Friable, brownish grey, silt. Frequent small pebbles and gravel. Early 19 th century construction feature.
6	6038	610	6027	3	Deposit. External stair footing. Handmade partial bricks 110x50mm. Light yellow/grey mortar. Early 19 th century Courthouse feature.
6	6039	611	6031	3	Deposit. Posthole. Friable, brownish grey, silt. Frequent small pebbles, gravel and CBM fragments.
6	6040	607	6009	4	Deposit. Slate sump/soak-away. 1.9x1.0m. Truncated by machining and modern footings. Late 19 th century Courthouse drainage feature.
6	6041	609	6018	4	Deposit. Brick wall. Aligned NE/SW. Handmade bricks 240x110x50mm. Grey mortar. Mid-19 th century infill wall between Courthouse and Isolation wing. Same as c6030.
6	6042	606	6011	4	Deposit. Wooden floor alteration. Sprung oak floorboards of varying sizes. 900x800mm. Late 19 th century cell room feature.
6	6043	608	6013	4	Deposit. Wooden floor. Sprung 6" oak floorboards. Mid-19 th century cell room feature.
6	6044	606	6012	4	Deposit. Wooden floor alteration. Sprung oak floorboards of varying sizes. 2.33x0.50-0.55m. Late 19 th century cell room feature.
6	6045	611	6025	3	Deposit. Wall/floor stub. Light grey mortar footing. 320x270x40mm. Early 19 th century Courthouse feature.
6	6046	609	6019	4	Deposit. Stair footing. Handmade bricks 220x110x60mm. Light grey mortar. Mid-19 th century infill feature between the Courthouse and Isolation wing.

APPENDIX 3 – WRITTEN SCHEME OF INVESTIGATION



WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL INVESTIGATIONS AT NORTHALLERTON PRISON

Site Location: HM Northallerton Prison, Northallerton

NGR: SE 37115 93808

Proposal: Demolition of the majority of former prison buildings and marketing of the site as a mixed use development including retail and community use.

Planning ref: CNY14985, NYCC Brief, HMPYO1, Northallerton

Prepared for: Hambleton District Council by York Archaeological Trust

Document Number: 2017/38

Version	Produced by		Edited by		Approved by	
	Initials	Date	Initials	Date	Initials	Date
1	GM/TK	11/07/17	IDM	06/09/17	IDM	06/09/17

1 SUMMARY

1.1 A development proposal has been submitted by Hambleton District Council for the demolition of several non-listed structures belonging to the former HM Northallerton Prison and the marketing of the site as a mixed development including retail and community.

1.2 The following archaeological planning requirement has been imposed:

The results of the archaeological recording are required to inform Hambleton District Council of the significance of the heritage assets affected by the proposal (NPPF para 128) and to provide an appropriate level of mitigation prior to redevelopment. Opportunities should also be provided for public engagement with project.

1.3 The following research requirement has been imposed:

The archaeological monitoring should attempt to define, the exact location, construction, phasing and operation of the following demolished buildings: -

- *The treadmill (1852) and pump house (Buildings M & N)*
- *The 1820s prison wing (Buildings F & J)*
- *The Smithy (Building H)*
- *The prison cook house and any associated midden deposits (Building I)*
- *The prison yard to the south of the Female Wing and link building (Grade II Listed)*

The labels indicated above relate to Figure 94 of the desk-based assessment of the prison conducted in March 2016 (Compass, 2016, 109). This figure has been used as a base plan for the WSI as outlined in more detail below.

1.4 This Written Scheme of Investigation (WSI) has been prepared in response to these requirements as outlined in the Brief supplied by the Principal Archaeologist for North Yorkshire County Council.

1.5 An additional site visit was undertaken in July 2017 to establish the site conditions post demolition. The results of these observations have also been amalgamated into the WSI as presented below.

1.6 The project will also involve a significant element of public archaeology, both on and off site. This work will have a wide ranging remit and include as many different consumers as realistically possible. It will also establish a marker for the proposed 'heritage centre' which will form part of the new development when completed. See section 16 Public Archaeology below.

1.7 The work will be carried out in accordance with the Brief and this WSI.

2 SITE LOCATION & DESCRIPTION

2.1 The proposal site is the former HM Northallerton prison centred on NGR SE 37115 93808 (Figures 1 & 2). The prison area is bound to the west by East Road and to the east by Crosby Road which join together at the north. The southern boundary of the site is formed by a road called The Link. These roads are surrounded by a mixture of residential and retail properties.

2.2 By July 2017 virtually all demolition work had been completed. The site was made up of a mixture of tarmac and concrete surfaces, rubble infill, and heaps of crushed material ready for re-use in future development.

2.3 The remaining listed buildings include the 1818 Female Wing, the 1852 Female Wing, the Link Building, the Governor's House and the Staff Tenement Range. These buildings are to be repurposed as part of the development plan meaning that they will still be standing during the archaeological investigations.

3 DESIGNATIONS & CONSTRAINTS

3.1 There are five Grade II listed buildings within the development area (listed in the previous section, 2.3).

3.2 The development site lies outside the Northallerton Conservation Area.

4 ARCHAEOLOGICAL INTEREST

4.1 The details discussed in this section are a summary of the findings of the desk based assessment produced by Compass Archaeology in March 2016. Further detail of the broader archaeological and historical background can be found in that document.

4.2 *Prehistoric/Romano British activity*

There is no direct evidence for prehistoric or Roman archaeology on this site. There was, however, Romano-British pottery recovered during archaeological investigation recovered on a site in close proximity to the prison (Compass, 2016, 13).

4.3 *Anglo Saxon activity*

There is significant evidence for the Saxon origins of Northallerton including a mid-9th century stone built church and references to it being the site of numerous battles.

4.4 *Medieval activity*

There is a body of evidence for the medieval development of Northallerton, particularly concerning the establishment of religious institutions including an Augustinian Friary (now the Fleece Inn, which also dates to the 15th century) and a Carmelite Priory (excavated in 2006). Other findings for the medieval period include reference to a Maison Dieu established in 1467 as well as numerous excavation sites revealing pits, ditches and other structures dating to the medieval period. None of these Saxon or Medieval findings, however, appear to correspond with the proposed development site and many of them had formed around the Northallerton High Street to the west (Compass, 2016, 14-18).

4.5 *Post medieval activity*

The post medieval period in Northallerton is characterised by the appearance of many buildings which stand to this day as well as other structural remnants and finds found during numerous watching briefs. Most of the evidence for this period is, again, confined to the area around Northallerton High Street (Compass, 2016, 24).

The development area was known as 'Priest Garth' up until 1784 when the Northallerton House of Correction was first proposed. This area is visible on maps from the 17th and 18th century and is thought to have been a swampy wasteland that was used by the locals as a dumping ground and a place to wash horses. There is also reference to a well within the original title deeds for the land (Compass, 2016, 106).

Development of prison from late 18th onwards is first visible on the Northallerton Tithe map of 1798. The map clearly shows an arrangement of buildings which formed the newly built Northallerton House of Correction (Compass, 2016, 33).

4.6 *19th century activity*

The original prison buildings were supplemented by the construction of new west and east wings and a Gaolers house, all designed by George Atkinson, between 1826 and 1828. This Gaolers house became the Governor's house and survived to the present day (Compass, 2016, 34).

Robert Creighton's map of Northallerton 1835 shows very little detail of the prison (it is a very schematic map) other than to show the area enclosed by its boundary wall. A plan of the prison by Captain Worsley in 1838, on the other hand, shows the layout of the older prison buildings in relation to the 1820s additions. The area demarcated for the treadmill, adjacent to the Gaolers house, was also marked. A separate plan drawn by Captain Worsley appeared to contain suggested alterations which were never carried out. These included the addition of a large number of washing sheds and work rooms to the south of the prison (Compass, 2016, 37-39).

By the late 1840s the prison had become overcrowded and between 1845 and 1852 improvements, again designed by Captain Worsley, were made. These included a three storey male prison wing, a three storey female prison wing, the demolition of the old hospital (replaced with four large rooms), a new chapel and a new treadmill which could accommodate 94 men (Compass, 2016, 42-43). These buildings, with the exception of the female wing and large treadmill, are present on the Richard Frances 'Plan of Northallerton Public Health', drawn in 1852 (Compass, 2016, 55).

All of the structures built in the 1820s and the additions made in the late 1840s are visible on the OS map (6" Yorkshire 56) of 1854-1857. A plan of the prison complex in 1870 by Captain Worsley shows it at its fullest extent. The 1870 plan shows all of the prison buildings, the North Riding Court House, a second Court house, a stable block and a coach house (Compass, 2016, 56-58).

The later 19th century maps typically only show the courthouse clearly with the layout of the other prison buildings being omitted. This was a security measure that was typically associated with prisons and military complexes. The 1894 OS map does still contain some artistic depiction of the layout of the buildings, labelled as a House of Correction, but none of them were clearly annotated (Compass, 2016, 65-66).

4.7 *20th century activity*

Northallerton prison tended to be shown as a single entity on maps from c1892 to c1938 (it started to be referred to as Her Majesty's Prison from c1894). In 1904 Northallerton Prison was closed to female prisoners and closed altogether in 1922 due to a decline in crime (Compass, 2016, 65-70).

It was reopened as an Army Gaol in 1939 and kept this purpose for the duration of the Second World War. It was used to house military prisoners from 1943 and in 1946 the infamous Glasshouse riots caused damage to the prison as prisoners set fire to the store rooms and threw slates from the roof down on the guards (Compass, 2016, 71).

In the post war period the prison remained open but became focused on young offenders. An aerial photograph of the prison taken in 1968 shows that most of buildings constructed in 1870 were still standing (Compass, 2016, 74).

In 1964, the institution became known as 'Northallerton Young Prisoners Centre'. Living conditions were modernised, with the now obsolete 60ft high prison chimney removed and the boundary wall extended. In 1983 it became the 'Northallerton Youth Custody Centre,' before becoming a 'Remand Centre' for 16-21 year olds awaiting trial and sentence in 1994. In 1995 a £7m enhancement scheme over 5 years was announced, including replacement of

unsafe outer walls. In 2010 the prison underwent another identity change as it went from a YOI to a HMP/YOI, housing both Young Offenders and adults from the North Yorkshire area. The prison finally closed in October 2013 as part of a modernisation programme that would "replace prisons that were either too expensive to run or needed substantial capital investment" (Compass, 2016, 74-75).

4.8 Summary

It is highly unlikely that there are any archaeological remains pre-dating the late 18th century development of the prison. Archaeological remains across the site will be almost exclusively related to the development of the prison compound over the last 2 centuries.

5 AIMS

5.1 The primary aim of the excavations relating to planning conditions are:

The results of the archaeological recording are required to inform Hambleton District Council of the significance of the heritage assets affected by the proposal (NPPF para 128) and to provide an appropriate level of mitigation prior to redevelopment. Opportunities should also be provided for public engagement with project.

5.2 As objectives to achieve the main aim, the archaeological monitoring should attempt to define the exact location, construction, phasing and operation of the following demolished buildings:

- The treadmill (1852) and pump house (Buildings M & N)
- The 1820s prison wing (Buildings F & J)
- The Smithy (Building H)
- The prison cook house and any associated midden deposits (Building I)
- The prison yard to the south of the Female Wing and link building (Grade II Listed)

5.3 To further refine the objectives the project will explore the following themes to understand the life of the prison by investigating where inmates:

- Entered - through the original gate house
- Lived - within the earlier prison wings
- Ate - evidence from the cookhouse and surrounds
- Worked - can we find evidence of the treadmill and early exercise yard
- Exited - through the gate house as above
- Or Died - the purported dead house and/or 'drop room' for hanging

5.4 In addition to the explicitly planning-related archaeological conditions there will also be a significant element of public archaeology linked with the investigations. See section 16 Public Archaeology below for a full discussion of these elements.

- The level of public engagement is in response to the clearly present, and expanding, local interest in the heritage of Northallerton
- Recent excavations with a public access element resulted in the exceptionally popular Rutson Hospital open days, with several hundred people in attendance. There will be at least one open day to reflect this, alongside a range of other ways that interested people can get involved.
- Significant local interest in the prison since its closure was demonstrated with successful, overbooked, tours of the buildings lead by HDC Tours will be expanded to include both elements of the standing prison buildings and the ongoing work, with its new discoveries, on the archaeological site. This will be

supplemented with archaeological workshops and hands-on experience for some members of the public

- There is already a wealth of knowledge regarding the prison, though this is yet to be fully collated. Part of the project will address this and create publicly accessible information, and an Oral History Record for the prison.
- Finally all of the output from the project would inform and add to the proposed heritage centre on the site.

5.5 The project should be carried out in line with: -

- Chartered Institute for Archaeologists 2014 *Charter and By-Law & Code of Conduct* CIfA
- Yorkshire, The Humber and the North East 2009 *A Regional Statement of Good Practice for Archaeology in the Development Process*

6 EXCAVATION METHODOLOGY

6.1 The excavation will comprise the following elements:

- Trial trenching
- Watching brief
- Reporting

Please note that further stages of work or other mitigation measures could be required by the local authority, depending upon the results of the evaluation.

6.2 Ground conditions visible during the site visit of July 2017 indicated the potential for significant below ground obstructions. This will of course restrict what can actually be dug during the excavation programme. With this in mind, machine clearance of investigation areas will begin in advance of the main excavation campaign. This is to ensure that both archaeological planning and public access requirements are viable with the proposed strategy.

6.3 A series of up to five areas will be excavated. The location of these areas is shown on Figure 3: Investigation Areas. It may be that multiple smaller trenches are excavated within these areas, depending on below ground obstructions and resources available.

Area	Size (m)	Rationale
1	Variable	To investigate and define the extent of the Smithy, the Prison Cook House and any associated midden deposits, and also the 1820's prison wing
2	Variable	To investigate possible coach house remains, any evidence of the 1820 prison wing, and the exercise yard to the south of the female wing. There is also potential for the dead house or 'drop room' to be investigated.
3	Variable	To investigate and define the extent of the treadmill (1852) and pump house.
4	Variable	To investigate the earlier gate house
5	Variable	To investigate the stables

6.4 The final excavation areas, and trench locations within, will be accurately plotted using an EDM Total station, a GPS, or by measurement to local permanent features shown on published

Ordnance Survey maps. All measurements will be accurate to +/-10cm, and the trenches locatable on a 1:2500 Ordnance Survey map. This is to ensure that the trenches can be independently relocated in the event of future work.

- 6.5 Overburden such as modern surfaces, demolition rubble or other superficial fill materials would be removed by a machine fitted with a toothless bucket. Mechanical excavation equipment would be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil, whichever appears first. If archaeology is present machining will cease and excavation will normally proceed by hand. Where deep homogenous deposits, or deposits such as rubble infills, are encountered, these may be carefully removed by machine, after consultation with Peter Rowe, Principal Archaeologist, NYCC
- 6.6 The use of a toothed excavation bucket, mechanical, air-powered, or electrical excavation equipment may also be appropriate for removing deep intrusions (e.g. modern brick and concrete floors or footings) or through deposits to check that they are of natural origin. Only material which clearly post dates the intended 'target' for the excavation will be excavated using this methodology. The machine will not be used to cut arbitrary sondages down to natural deposits.
- 6.7 Trenches within excavation areas will be sufficiently cleaned by hand to enable potential archaeological features to be identified and recorded; areas without archaeological features will be recorded as sterile and no further work will take place in these areas. The stratigraphy of all trenches will be recorded on trench record sheets even where no archaeological features are identified.
- 6.8 A sufficient sample of any archaeological features and deposits revealed will be excavated in an archaeologically controlled and stratigraphic manner in order to establish the aims of the evaluation.
- 6.9 A watching brief will be undertaken to monitor the ground works in the vicinity of the potential access tunnel from the prison to the court house.

7 RECORDING METHODOLOGY

- 7.1 If a base plan of intervention areas is available, the areas being excavated will be determined using this information. If a plan is not available the location of the intervention areas will be determined using a GPS or Total Station survey.
- 7.2 Unique context numbers will only be assigned if artefacts are retrieved, or stratigraphic relationships between archaeological deposits are discernible. In archaeologically 'sterile' areas, soil layers will be described, but no context numbers will be assigned. Where assigned, each context will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions.
- 7.3 Archaeological deposits will be planned at a basic scale of 1:50, with individual features requiring greater detail being planned at a scale of 1:20. Larger scales will be utilised as appropriate. Cross-section of features will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids

interpretation, structural remains will also be recorded in elevation. All drawings will be drawn on drafting film. All drawings will adhere to accepted drawing conventions

- 7.4 Photographs of archaeological deposits and features will be taken. This will include general views of entire features and of details such as sections as considered necessary. The photographic register will comprise 35mm format black and white prints and digital photography (minimum resolution of 10 megapixels as high quality .jpg or .raw data files). All site photography will adhere to accepted photographic record guidelines.
- 7.5 Areas which are inaccessible (e.g. for health and safety reasons) will be recorded as thoroughly as possible within the site constraints. In these instances, recording may be entirely photographic, with sketch drawings only.
- 7.6 All finds will be collected and handled following the guidance set out in the ClfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds, and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.
- 7.7 All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication *First Aid for Finds*, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.
- 7.8 A soil sampling programme will be undertaken for the recovery and identification of charred and waterlogged remains in the unlikely event that suitable deposits are identified. The collection and processing of environmental samples will be undertaken in accordance with Historic England guidelines (Campbell, Moffatt and Straker 2011). Environmental and soil specialists will be consulted during the course of the evaluation with regard to the implementation of this sampling programme. Soil samples of approximately 30 litres for flotation (or 100% of the features if less than this volume) will be removed from selected contexts, using a combination of the judgement and systematic methodologies.

Judgement sampling will involve the removal of samples from secure contexts which appear to present either good conditions for preservation (e.g. burning or waterlogging) or which are significant in terms of archaeological interpretation or stratigraphy.

- **Systematic sampling** will involve the sampling of all cut features and buried ground surfaces. The spatial distribution of systematic samples cannot be predetermined, given the relatively small nature of the areas available in an evaluation.

- 7.9 Industrial activity may be present on the site. If industrial activity of any scale is detected, industrial samples and process residues will also be collected. Separate samples (c 10ml) will be collected for micro-slugs (hammer-scale and spherical droplets) (English Heritage 2001).
- 7.10 Other samples will be taken, as appropriate, in consultation with YAT specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil

micromorphology, monolith samples, C14, etc). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.

7.11 In the event of human remains being discovered during the evaluation these will be left in-situ, covered and protected, in the first instance. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and curator will be informed immediately. An osteoarchaeologist will be available to give advice on site.

- If **disarticulated** remains are encountered, these will be identified and quantified on site. If trenches are being immediately backfilled, the remains will be left in the ground. If the excavations will remain open for any length of time, disarticulated remains will be removed and boxed, for immediate reburial by the Church.
- If **articulated** remains are encountered, these will be excavated in accordance with recognised guidelines (see 7.12) and retained for assessment.
- Any grave goods or coffin furniture will be retained for further assessment.

7.12 Where a licence is issued, all human skeletal remains will be properly removed in accordance with the terms of that licence. Where a licence is not issued, the treatment of human remains will be in accordance with the requirements of Civil Law, ClfA Technical Paper 13 (1993) and Historic England guidance (2005).

8 SPECIALIST ASSESSMENT

8.1 The stratigraphic information, artefacts, soil samples, and residues will be assessed as to their potential and significance for further analysis and study. The material will be quantified (counted and weighted). Specialists will undertake a rapid scan of all excavated material. Ceramic spot dates will be given. Appropriately detailed specialist reports will be included in the report.

8.2 Materials considered vulnerable should be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues on or in pottery, and mineral-preserved organic material). Allowance will be made for preliminary conservation and stabilization of all objects and a written assessment of long-term conservation and storage needs will be produced. Once assessed, all material will be packed and stored in optimum conditions, in accordance with Watkinson and Neal (1998), ClfA (2008) and Museums and Galleries (1992).

8.3 All finds will be cleaned, marked and labelled as appropriate, prior to assessment. For ceramic assemblages, any recognised local pottery reference collections and relevant fabric Codes will be used.

8.4 Allowance will be made for the recovery of material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary. This will be decided in consultation with Peter Rowe, Principal Archaeologist, NYCC

9 REPORT & ARCHIVE PREPARATION

- 9.1 Upon completion of the site work, a report will be prepared to include the following:
- a) A non-technical summary of the results of the work.
 - b) An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
 - c) An account of the methodology and detailed results of the operation, describing structural data, archaeological features, associated finds and environmental data, and a conclusion and discussion.
 - d) A selection of photographs and drawings, including a detailed plan of the site accurately identifying the areas monitored, trench locations, selected feature drawings, and selected artefacts, and phased feature plans where appropriate.
 - e) Specialist artefact and environmental reports where undertaken, and a context list/index.
 - f) Details of archive location and destination (with accession number, where known), together with a context list and catalogue of what is contained in that archive.
 - g) A copy of the key OASIS form details
 - h) Copies of the Brief and WSI
 - i) Additional photographic images may be supplied on a CDROM appended to the report
- 9.2 Three copies of the report will be submitted to the commissioning body. A bound and digital copy of the report will be submitted direct to Hambleton District Council for planning purposes, and subsequently for inclusion into the HER.
- 9.3 A field archive will be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs will be produced. York Archaeological Trust will liaise with the client and the local planning authority to define the appropriate process for depositing the archive. Unless alternative arrangements are proposed, then YAT will contact the appropriate museum prior to the commencement of fieldwork to establish the detailed curatorial requirements of the museum and discuss archive transfer and to complete the relevant museum forms. The relevant museum curator would be afforded access to visit the site and discuss the project results.
- 9.4 The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the Local Authority and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.
- 9.5 Upon completion of the project an OASIS form will be completed at <http://ads.ahds.acuk/project/oasis/>.

10 POST EXCAVATION ANALYSIS & PUBLICATION

- 10.1 The information contained in the evaluation report will enable decisions to be taken regarding the future treatment of the archaeology of the development site and any material recovered during the evaluation.
- 10.2 If further archaeological investigations (mitigation) take place, any further analyses (as recommended by the specialists, and following agreement with Peter Rowe, Principal Archaeologist, NYCC) may be incorporated into the post-excavation stage of the mitigation programme unless such analysis are required to provide information to enable a suitable mitigation strategy to be devised. ***Such analysis will form a new piece of work to be commissioned.***
- 10.3 In the event that no further fieldwork takes place on the site, a full programme of post excavation analysis and publication of artefactual and scientific material from the evaluation may be required by Peter Rowe, Principal Archaeologist, NYCC ***Where this is required, this work will be a new piece of work to be commissioned.***
- 10.4 If further site works do not take place, allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.
- 10.5 The results of this work will be publicised locally via the public engagement programme outlined in section 16.
- 10.6 Options for publication and public access will be discussed with the client, particularly regarding any potential future Heritage Centre.
- 10.7 A significant element of the dissemination will rely on the public participation element of the project, listed in section 16.
- 11 HEALTH AND SAFETY
- 11.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.
- 11.2 A Risk Assessment will be prepared prior to the start of site works.
- 12 PRE-START REQUIREMENTS
- 12.1 The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.
- 12.2 The client will provide York Archaeological Trust with up to date service plans and will be responsible for ensuring services have been disconnected, where appropriate.
- 12.3 The client will be responsible for ensuring that any existing reports (e.g. ground investigation, borehole logs, contamination reports) are made available to York Archaeological Trust prior to the commencement of work on site.
- 12.4 The client will be responsible for providing suitable, lockable, site accommodation for the excavation team for the duration of the excavation. This will include toilets and messing facilities as discussed during the site visit of July 2017.
- 12.5 The client will be responsible for ensuring that additional barrier control fencing, site accommodation and access requirements for public access, are in place as required.

13 REINSTATEMENT

- 13.1 York Archaeological Trust are not responsible for backfilling excavated areas or reinstating any surfaces, including reseeding, unless specifically commissioned by the client who will provide a suitable specification for the work.

14 TIMETABLE & STAFFING

- 14.1 The timetable has an intended start date of 29/08/17 for initial machining, this is followed on 04/09/17 by the rest of the site team, with public access beginning on the 06/09/17.

- 14.2 Specialist staff available for this work are as follows:

- Human Remains – Malin Holst
- Palaeoenvironmental remains – PRS Ltd
- Head of Curatorial Services - Christine McDonnell
- Finds Researcher - Nicky Rogers
- Pottery Researcher - Anne Jenner
- Finds Officers – Nienke Van Doorn
- Archaeometallurgy & Industrial Residues – Rachel Cubitt and Dr Rod Mackenzie
- Conservation - Ian Panter

15 MONITORING OF ARCHAEOLOGICAL FIELDWORK

- 15.1 As a minimum requirement, Peter Rowe (Principal Archaeologist, NYCC) will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general stratigraphy of the site can be assessed and to discuss the requirement any further phases of archaeological work. York Archaeological Trust will notify Peter Rowe (Principal Archaeologist, NYCC) of any discoveries of archaeological significance so that site visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with Peter Rowe (Principal Archaeologist, NYCC).

16 PUBLIC ARCHAEOLOGY & ACCESS

- 16.1 The primary aims of the project include the integration of a fully committed Public Archaeology & Access element. The following elements, which have been designed following discussions between YAT and Hambleton District Council, are how this will be achieved.

- 16.2 As the prison site has the potential for significant truncation and below ground obstruction, there is likelihood that the archaeological remains may be limited. This would allow a significant shift of emphasis for the resources of excavation towards the public, the people of Northallerton and beyond, who have a link with the site.

- 16.3 All of the site team involved in the excavation will have experience of public archaeology and able to fulfil a number of the roles suggested below. The team will comprise of a Project Officer, Project Supervisor and two Excavation Assistants. This could be augmented by an additional Project Supervisor or Excavation assistant, without additional transport costs.

- 16.4 It is assumed that the on-site excavation will run for a period of 4 weeks. There will be an additional week lead-in to this to establish what archaeology is present and where. This will enable community engagement, in the way of tours, from week 1.

16.5 With the, as yet, unknown potential of the site dictating what is ultimately possible there are different categories for what could be delivered. This is an updated version of what was presented within the initial Tender and Capability Statement (YAT 2017/29).

HDC - Hambleton District Council (plus experienced volunteers i.e. former guards etc)

YAT - YAT costs as outlined in capability statement

Item	When	Frequency	Description	Who/where	Users
PUBLICITY & TOURS					
16.6 Site explanation boards	Wk 0 (pre-start) onwards	Once, possibly updated once.	External signage to explain what is happening, how to get involved, and also what could you (as a member of the public) could add to the project.	HDC or YAT	Passing public or any interested parties
16.7 Site tours Depends on spaces and availability.	Wk 1-4 Wed-Fri	Optional	Set tours to show people the archaeological remains as well as the standing buildings	HDC experienced volunteers etc & YAT. On site & in standing wing	Passing public or interested parties. (If very busy pre-booking possible) 20 people maximum
16.8 Group tours	Wk 1-4 Wed-Fri	Daily c10.30am & 3pm	As per site tours but focussed as per specific groups	HDC experienced volunteers etc & YAT. On site & in standing wing	Pre-booked groups 30 people maximum
16.9 School tours	Wk 1-4 Wed-Fri	Daily c10.30am & 3pm (see above)	As per site tours, but pre-booked by schools	HDC experienced volunteers etc & YAT. On site & in standing wing	Pre-booked school groups Single class c30 maximum
ORAL HISTORY PROJECT					
16.10 Oral History Stakeholders Workshop	Wk 0 (pre-start)	Once	An introduction to what we will be doing, how we do it as well as registration and research regarding Oral History Recording.	YAT with HDC hosting at Civic Centre	All people who sign up, with spaces reserved for priority users. Variable numbers

Item	When	Frequency	Description	Who/where	Users
16.11 Oral History Recording	Variable	Up to 14	Interview, documentation and archive	YAT with HDC hosting at Civic Centre	Results of research & people who volunteer Variable numbers
WORKSHOPS					
Oral History (See above)	See above	See above	See above	See above	See above
16.12 Site processes and recording	Wk 2 Tue	AM/PM sessions	2 Members of site team show and explain what we do to investigate and record the site.	YAT On site & in standing wing if wet	All people who sign up, with spaces reserved for priority users 20 people maximum per session
16.13 Finds and Conservation	Wk 3 Tue	AM/PM sessions	The processes of processing and packaging finds is explained. The basics of conservation are covered in a parallel session.	YAT On site & in standing wing	All people who sign up, with spaces reserved for priority users 20 people maximum per session
16.14 Post-excavation processes	Wk 4 Tue	AM/PM sessions	What do we do with the data from site once we are finished. How do we write the report?	YAT On site & in standing wing	All people who sign up, with spaces reserved for priority users 10 people maximum per session
YOUR DIG					
16.15 <i>Your Dig</i> excavation participation	Wk2-4 Wed-Fri (not Friday of Wk4) Can run parallel with 16.16	All day	Pre-registered attendees are inducted into the site and work alongside a staff member excavating and recording the archaeology	YAT On site	Pre-registered public members. They must have their own Safety Boots (unless HDC buy). Priority groups identified by HDC 4 people per day maximum if one staff member

Item	When	Frequency	Description	Who/where	Users
16.16 Your Dig Excavation experience for local community groups with additional support needs	Wk2-4 Wed-Fri (not Friday of Wk4) Can run parallel with 16.15	All day	As above. There will be extra input from the Community Engagement Manager	YAT On site	Pre-registered priority groups. They must have their own Safety Boots (unless HDC buy). 2 people per day maximum with input from Community Engagement Manager
OPEN DAY					
16.17	Wk 2 & 4 Saturday	All day 10am-4pm	Site gate main gate is open for visitors to come in to view the site and buildings. (Fencing would be used to restrict access as appropriate)	YAT & HDC on site and in standing wing	Anybody These could be held more than once depending on demand

- 16.6 Site explanation boards should include the data collated previously, what is planned with the current phase of works, and then how to get involved.
- 16.7 Site tours would run from the first week, Wednesday - Friday. They are optional and depend if spaces from the group tours are not fully booked.
- The format would be as discussed during the July site meeting, with a tour of the archaeology and methods by one of the YAT staff and a tour of the standing prison wing by a HDC experienced volunteer. The whole tour would last 1 hour maximum.
- 16.8 Group tours would run on the same days as and be of the same format as the site tours above. The maximum number on the tour would be c30 people.
- 16.9 School tours would share the slot with group tours (above), so either a group tour or a school tour would take place. The format is again the same, with a maximum number of c30 depending on class size.
- 16.10 Oral history stakeholder workshop – An introduction to what we will be doing, how we do it as well as registration and research regarding Oral History Recording. The committee engagement team will be on hand to assess material that has already been submitted to project. They will invite interested parties and stakeholders along to the workshop to discuss the oral history project's aim and potential themes. The team will make bookings for the oral history recordings, which will be carried out later on, once the excavation is underway.

- 16.11 Oral history recording – The community engagement team will carry out a set number of oral history interviews at the Hambleton District Council premises. Hambleton District Council’s team will carry out the initial making of contact and bookings for these interviews. YAT will provide the equipment and staff for the interviews and will create an archive the will be submitted to the council once it is complete. We will also create blog entries with audio clips for the council’s website.
- Seven interviews can be carried out, documented and archived per week. Two weeks oral history work will result in 14 interviews. More Oral history interviews could be delivered over a longer time scale if required.
- 16.12 Site processing and recording workshop. Two of the site team will take the group through the processes of excavation and recording without having to access the trenches (no formal Personal Protective Equipment PPE required).
- 16.13 Finds and conservation workshop. Two staff members will go through the basic elements of processing finds and conservation of more fragile materials. This will ideally take place with materials retrieved from site, otherwise example will be brought from the YAT collections.
- 16.14 Post-excavation processes workshop. Two of the site team will deliver this session. This will act as a follow up to site recording session and expand upon what is done with the on-site records and how they would be put together to create a report.
- 16.15 *Your Dig* excavation participation would be supervised by a single staff member and involved a day on site working with the staff member as part of the excavation team. PPE would be required in the way of safety boots.
- 16.16 *Your Dig* excavation participation for groups with additional support needs would follow the exact same format as 16.15 above. In this case the Community Engagement Manager would offer additional site support and thus the maximum number for those days would be 6 attendees.
- 16.17 A total of two open days will take place (week 2 and week 4). These would take place on Saturday and run from 10am until 4 pm. The archaeology team would be there to show people the trenches and finds from within. The HDC experienced volunteers would be there to conduct tours of the standing buildings. This could also co-ordinate with any major press releases regarding the future of the site.
- 16.18 A standard working week for a team of 4 is displayed in the table below.

Monday	Tuesday	Wednesday	Thursday	Friday
Site team get the week set up and get on with the contract archaeological elements No public access on this day.	Contract team continue. Wk 2- 4 Workshops - appropriate deployed to workshops	Contract team continue. Wk 1-4 Tours - staff member deployed to am and pm tours. Wk 2-4 <i>Your Dig</i> - staff member deployed to <i>Your Dig</i> site team	Contract team continue. Wk 1-4 Tours - staff member deployed to am and pm tours. Wk 2-4 <i>Your Dig</i> - staff member deployed to <i>Your Dig</i> site team	Contract team continue. Wk 1-4 Tours - staff member deployed to am and pm tours Wk 2-4 <i>Your Dig</i> - staff member deployed to <i>Your Dig</i> site team

- Mondays are kept completely clear as they will allow the contract elements of the work to be managed appropriately, without external pressures. It will also allow realistic time for admin and setup for elements in the forthcoming week.
- Tuesdays are reserved purely for the workshop parts of the project, from the 2nd week onwards. These will require at least 2 members of staff, leaving just 2 continuing with the contract work. Any further pressures on the contract staffing, and having no lone working, means that tours etc cannot be run on these days.
- Wednesday - Friday are open for 2x tours per day (weeks 1-4) and also *Your Dig* site access (weeks 2-4). Each of these elements would require a single staff member, thus leaving the minimum of two of the contract team on site.

16.19 Standard working day for a team of 4

8.00-9.40am		10.00-12.00am		12.30-2.00pm		2.20-4.00pm
Contract Mon-Fri Site team get set up for the day. Contract work goals established.	Break	Contract Mon-Fri Team continue.	on site Lunch - nobody working	Contract Mon-Fri Team continue.	Break	Contract Mon-Fri Team continue.
Tours Tue-Fri Staff get ready for the day as required		Tours Tue-Fri c10.30am 1 staff member greets people on site tour. In conjunction with HDC experienced volunteers		Tours Tue-Fri n/a		Tours Tue-Fri c3pm 1 staff member greets people on site tour. In conjunction with HDC experienced volunteers

8.00-9.40am		10.00-12.00am		12.30-2.00pm		2.20-4.00pm
<i>Your Dig</i> Wed-Fri Staff get ready for the day as required		<i>Your Dig</i> Wed-Fri 10am 1 staff member greets and inducts any <i>Your Dig</i> team members for the day. They then get started on site		<i>Your Dig</i> Wed-Fri Team continue working with their allocated staff member and also contract team		<i>Your Dig</i> Wed-Fri Team continue working with their allocated staff member and also contract team
Workshops Staff get set up for day ahead		Workshops Meet and greet of attendees then get started with first session		Workshops Meet and greet of attendees then get started with second session		Workshops The second session would overlap slightly into this period.

16.20 The following table indicates the maximum number of users/consumers of the proposed community elements.

Item	When	Frequency	Users
PUBLICITY & TOURS			
16.6 Site explanation boards	Wk 0 (pre-start) onwards	Once, possibly updated once.	Unlimited depending on footfall and duration displayed
16.7 Site tours	Wk 1-4 Wed-Fri	Optional if spaces	Up to 240 individual people (up to 240 more depending on group/school tours bookings)
16.8 Group tours	Wk 1-4 Wed-Fri	am & pm	Up to 720 individual people (figures depend on school tour numbers)
16.9 School tours	Wk 1-4 Wed-Fri	am & pm	Up to 720 individual people (figures depend on group tour numbers)
ORAL HISTORY PROJECT			
16.10 Oral History Workshop	Wk 0 (pre-start)	Once	Up to 20 individual people
16.11 Oral History Recording	Variable	Up to 14	Up to 14 individual people
WORKSHOPS			
16.12 Site processes and recording	Wk 2 Tue	AM/PM sessions	Up to 40 individual people
16.13 Finds and Conservation	Wk 3 Tue	AM/PM sessions	Up to 40 individual people

Item	When	Frequency	Users
16.14 Post-excavation processes	Wk 4 Tue	AM/PM sessions	Up to 20 individual people
YOUR DIG			
16.15 <i>Your Dig</i> excavation participation	Wk2-4 Wed-Fri (not Friday of Wk4)	All day	Up to 32 individual people
16.16 Your Dig Excavation experience for local community groups with additional support needs	Wk2-4 Wed-Fri (not Friday of Wk4) Can run parallel with 16.15	All day	Up to 48 individual people (must be combined with number in 16.15)
OPEN DAY			
16.17	Wk 3 or 4	All day 10am-4pm	400 people +

17 COPYRIGHT

- 17.1 York Archaeological Trust retain the copyright on this document. It has been prepared expressly for the named client, and may not be passed to third parties for use or for the purpose of gathering quotations.

18 KEY REFERENCES

Brown, D. H., 2007. *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation*. ClfA/AAA

Campbell, G, Moffett, L. and Straker, V., 2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition). Portsmouth: Historic England

Chartered Institute for Archaeologists by J. I. McKinley, and C Roberts., 1993. *Excavation and post-excavation treatment of cremated and inhumed human remains*. ClfA technical paper **13**

Chartered Institute for Archaeologists, 2008. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*

Chartered Institute for Archaeologists, (second edition) by D.H. Brown, 2011. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*

Chartered Institute for Archaeologists, 2014. *Standard and Guidance for Archaeological Field Evaluation*

- Compass Archaeology, 2016. *HMPYOI Northallerton, East Road, Northallerton, North Yorkshire, DL6 1NW: An Archaeological Desk-based Assessment*
- Department for Communities and Local Government, 2012. National Planning Policy Framework
- Historic England, 2002. *With Alidade and Tape – graphical and plane table survey or archaeological earthworks*
- Historic England, 2006. *Guidelines on the x-radiography of archaeological metalwork*
- Historic England, 2007. *Understanding the Archaeology of Landscape – a guide to good recording practice*
- Historic England, 2008. *Investigative Conservation*
- Historic England, 2015. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*
- Historic England, 2015. *Archaeometallurgy. Guidelines for Best Practice*
- Historic England, 2015. *Piling and Archaeology. Guidelines and Best Practice*
- Historic England, 2015. Where on Earth are We? The Role of Global Navigation Satellite Systems (GNSS) in Archaeological Field Survey Historic England. 2015. *Geoarchaeology: using earth sciences to understand the archaeological record*
- Historic England, 2016. *Preserving Archaeological Remains. Decision-taking for Sites under Development*
- Historic England, 2017 (2nd Edition). *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*
- Museum and Galleries Commission, 1992. *Standards in the museum care of archaeological collections*
- Neal, V. and Watkinson, D., (eds), 1998. *First Aid for Finds: practical guide for archaeologists.* United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section; 3rd Revised Edition.
- RCHMS, 1999. *Recording Archaeological Field Monuments – a descriptive specification*
- South Yorkshire Archaeology Service, 2011. Yorkshire, the Humber & the North East: A Regional Statement of Good Practice for Archaeology in the Development Process <https://www.sheffield.gov.uk>
- Standing Conference of Archaeological Unit Managers (SCAUM), 2007. *Health and Safety in Field Archaeology*
- YAT 2017/29 *Tender Submission and Capability Statement: Archaeological Investigations at Northallerton Prison.*

Figure 1 Site Regional Site Location - Removed from final report

Figure 2 Detailed Site Location – Removed From final report

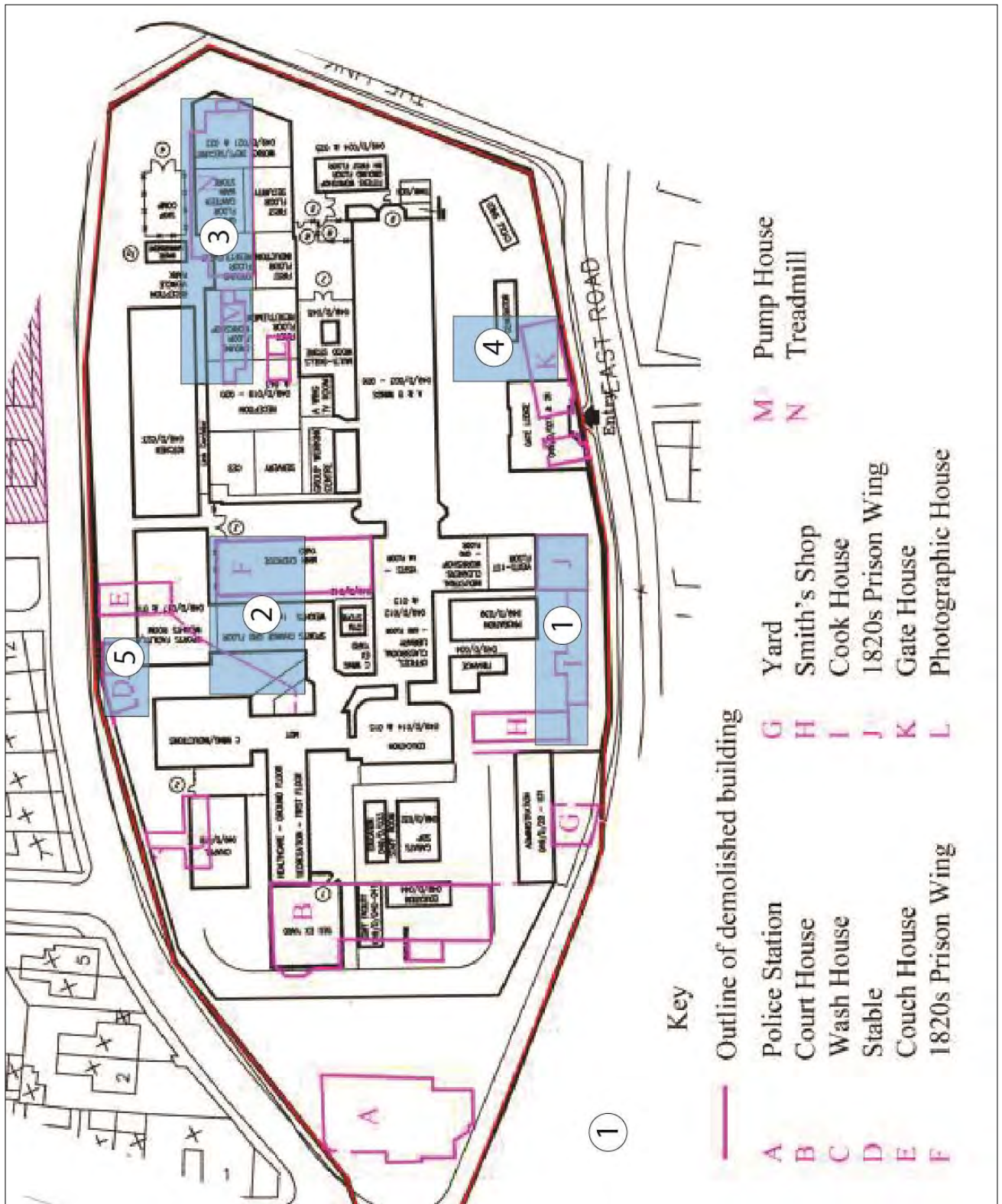


Figure 3 Proposed Excavation Areas (After fig.94, Compass, 2016) not to scale

APPENDIX 4 – POTTERY ASSESSMENT REPORT

Project 5967, Northallerton Prison
BY SARAH MENCE and ANNE JENNER

INTRODUCTION

Consistent with the sterile nature of the Northallerton Prison site there were only a small number of contexts which contained pottery. 640 sherds of mainly domestic pottery were retrieved from 6 Contexts. They range from 16th Century to 19th Century, though the bulk of the material is 19th Century in date.

There is very little residuality or intrusion within the assemblage. While many of the sherds are quite small, there are some large pieces of earthenware pancheons, sanitary ware, and a few sherds of tiles.

METHODOLOGY

Visual analysis involved separating fabric and form groups by date and type. The numbers, and sherd size are then recorded in tabular form (see Table ** below). Decorative schemas, stamps and other significant features were also noted.

DISCUSSION

The majority of the material reflects domestic activities including eating, drinking and sanitation during the 19th Century.

The majority of the pottery came from context 5042 which was associated with the grain mill. The quantity of sanitary wares within this context may well relate to the alterations of the toilet area during the construction of the grain mill.

Pottery from context 3005 dates from before the construction of the prison and mostly consists of pottery associated with food preparation. Pottery recovered from context 3005, a deposit of landscaping material, dates from before the prison construction. The pottery was mostly domestic ware associated with food preparation. This can be interpreted as the pottery being brought in with the makeup deposit as part of the landscaping of the area in preparation for the prison.

Pottery recovered from the culvert (c3011) is contemporary with 19th century prison activity whereas the pottery within contexts 5012 and 5003, though 19th century in date, appear to redeposited through demolition.

Context 3008 was not accessed.

RECOMMENDATIONS FOR FURTHER WORK

There are no recommendations for further work.

Table 5 Pottery Quantification

Context	Find	Quantity	Dating	Details	Phase
3005	BF19	17	19 th Century	<p>1 Slip Ware pie dish body mottled brown decoration small sherd</p> <p>1 Transfer printed plate rim small sherd</p> <p>1 Slip Ware pancheono rim medium sherd</p> <p>1 Terracotta with white slip rim large sherd</p> <p>4 Cream Ware plate small sherd</p> <p>1 Cream Ware scrap</p> <p>4 Cistercian / Early Black bowl body and rim</p> <p>2 Mottle brown glazed post medieval red earthenware</p> <p>1 Fine post medieval red ware with white slipped horizontal line - decoration rim medium / large sherd high fired</p> <p>1 Stoneware with white painted surfaces small drain cover or jar with ribbed rim small sherd</p>	2
3011	BF21	5	19 th Century	<p>1 Slip ware pie dish rim mottled decoration medium sherd</p> <p>1 Slip ware pie dish body plain</p> <p>1 Tin Glazed plate rim very small sherd</p> <p>1 Buff Stoneware rim small sherd</p> <p>1 Slip Ware posset body very small sherd</p>	4
5003	BF22	5	19 th Century	<p>1 Light Blue Stoneware dish body small sherd</p> <p>2 Transfer printed open body</p> <p>1 Tin Glazed Body scrap</p> <p>1 Grey Stoneware scrap</p>	6
5012	BF23	38	19 th Century	<p>1 English stoneware bottle rim dark brown splashes on brown and cream glaze small sherd</p> <p>3 Pearl ware body dark brown transfer printed with foliate small sherd</p> <p>2 Cream ware saucer base and rim pink band x 2 transfer printed pedestal foot small sherd fragments join</p> <p>14 White stoneware food jar base, body, and rim heavy ridges corrugated stamped base medium sherd many fragments join</p> <p>9 White stoneware jar body base, body, and rim small sherd</p> <p>5 Cream moulded stoneware jar? body moulded foliate decoration ivy small sherd</p> <p>3 Tin glazed bowl rim and body blue foliate decoration flanged bowl small sherd</p> <p>1 English stoneware jar / jug ? body thick wall small sherd</p>	5

APPENDIX 5 – THE ANIMAL BONE

Project 5967, Northallerton Prison
BY NIENKE VAN DOORN

INTRODUCTION

Excavations on the Northallerton Prison site have produced an assemblage of hand collected animal bone. These animal bones were recovered from 6 contexts. From 3 of those contexts, a small amount of shell was also recovered. This assemblage has been rapidly assessed focussing primarily on the range of animal taxa present.

METHODOLOGY

The faunal remains were examined and recorded with guidance from Dobney et al. (1999) and O'Connor (2008). Evidence of butchery, gnawing, burning or post depositional damage was recorded where present, with reference to Shipman et al. (1984) and Stiner et al. (1995).

Identification of species was completed using published identification guides (Pales & Lambert 1971). Wherever identification to species could not be achieved, bone fragments were classified using the following categories; unidentified mammal, unidentified bird, or unidentified fish. Mammalian fragments that retained characteristics that enabled estimation of the size of the animal were assigned to one or more of the following categories: large mammal (the size of horse/cow/large cervid [i.e. deer]), medium mammal 1 (the size of sheep/goat/pig/small cervid), medium mammal 2 (the size of dog/cat/hare), small mammal (the size of rodents, mustelidae (badger/otter/polecat family) etc). Very small bone scraps (usually smaller than 10mm) were recorded as unidentifiable and only counted approximately.

DISCUSSION

The results are outlined in table 1.

Table 6 Animal Bone from Northallerton Prison

CONTEXT	QUANTITY AND DESCRIPTION	TAPHONOMY	COMMENTS
3005	3 horse teeth, 5 cattle teeth and more than 20 fragments of large mammalian bone. Shell: 5 cockle and oyster fragments.	Pale and fragmented	
3008	3 cattle teeth. Shell: 1 cockle fragment.		
3011	1 rib fragment of medium (1) sized mammal	Concretions present.	
5003	1 cattle rib fragment, 1 large mammal long bone fragment, 1 tibia of a small to medium mammal, likely rabbit.	Rib fragment dark, long bone fragment and tibia very pale	

5012	1 sheep calcaneus, 1 immature medium mammal femur distal end.	Burnt white, calcified (5). Calcaneus partially burnt.	
5042	Multiple (more than 30) large to medium (1) sized mammalian bone fragments. 1 sheep astragalus. 1 pig metapodial, 1 pig tooth. 2-3 bird bones and a beak fragment from a large bird, possibly goose. 1 rabbit ulna fragment and 1 rabbit metatarsal IV. Shell: 3 oyster and 5 cockle fragments.	Iron staining. Very eroded and varied colour and taphonomy. Dark staining on sawn cattle ribs.	2 cattle rib fragments have saw marks (sawn through, smooth surface).

The bone from context 5012 showed signs of burning to full calcification. Most of the assemblage has a varying taphonomy, staining and colouration.

conclusion

The animal bone recovered from Northallerton Prison contained mostly mammalian bone, and consists of domestic taxa such as cattle, horse, pig and sheep. In addition, common domestic bird species such as geese and common game such as rabbit was present, as well as shell from edible mollusc taxa.

Most of the assemblage seems to be consistent with undifferentiated domestic refuse. While some evidence of sawing was present, no extensive evidence for specialised butchery was found. The material is very abraded, and bones were often stained, burnt or contained concretions, which may further indicate dumping of domestic waste.

RECOMMENDATIONS FOR FURTHER RESEARCH

The collection of animal bone has limited potential for further research. The animal bone does not reflect any specific activity taking place on the site and is in overall a fairly poor condition.

RECOMMENDATIONS FOR RETENTION/DISCARD

It is recommended that the animal bone collection is discarded after recording according to museum disposal guidelines.

REFERENCES

- Dobney, K., Jacques, D.S., Johnstone, C.J. (1999) Protocol for recording vertebrate assemblages, *Reports from the Environmental archaeology Unit, York*, 99, 15, p. 1–12.
- O'Connor, T. (2008). *The Archaeology of Animal Bones* Texas; Texas A&M University Press
- Shipman, P., Foster, G., Schoeninger, M. J. 1984. 'Burnt bones and teeth: an experimental study of colour, morphology, crystal structure and shrinkage', *Journal of Archaeological Science* 11, pp. 307-325.
- Stiner, M. C.; Kuhn, S. L.; Weiner, S.; Bar-Yosef, O. 1995. 'Differential burning, recrystallisation, and fragmentation of archaeological bone', *Journal of Archaeological Science* 22, pp.223-227.

TABLES

Table 7 Drawing Register

Drawing No.	Type	Scale	Trench	Description
1	Section	1:20	1	Section showing stratigraphy down to Natural in Trench 1
2	Section	1:20	2	Section showing stratigraphy down to Natural in Trench 2, next to chimney footing
3	Section	1:20	3	Section showing stratigraphy down to Natural in Trench 3, including 19 th century yard surface
4	Section	1:20	4	Section showing stratigraphy down to Natural in Trench 4
5	Section	1:20	6	Section showing stratigraphy down to Natural in Trench 6, including 19 th century yard surface

Table 8 B&W Photographic Register

Trench	Film No.	Photo No.	Direction Facing	Description
n/a	1	1	Unknown	Unknown
n/a	1	2	Unknown	Unknown
n/a	1	3	Unknown	Unknown
n/a	1	4	Unknown	Unknown
n/a	1	5	Unknown	Unknown
n/a	1	6	Unknown	Unknown
n/a	1	7	Unknown	Unknown
n/a	1	8	Unknown	Unknown
n/a	1	9	Unknown	Unknown
n/a	1	10	Unknown	Unknown
n/a	1	11	Unknown	Unknown
n/a	1	12	Unknown	Unknown
n/a	1	13	Unknown	Unknown
n/a	1	14	Unknown	Unknown
n/a	1	15	Unknown	Unknown
n/a	1	16	Unknown	Unknown
n/a	1	17	Unknown	Unknown
n/a	1	18	Unknown	Unknown
n/a	1	19	Unknown	Unknown
n/a	1	20	Unknown	Unknown
n/a	1	21	Unknown	Unknown
1	1	22	SSE	Trench 1 Shot
1	1	23	WSW	Trench 1 Shot
1	1	24	ENE	Detail shot of walls
1	1	25	SSE	Detail shot Prison Wing
1	1	26	WSW	Detail shot of Flue & Stone drain
2	1	27	NW	Trench 2 Shot
2	1	28	NNW	Detail shot of Chimney
2	1	29	WSW	Trench 2 Shot
2	1	30	NE	Trench 2 Shot
2	1	31	SSW	Detail shot of Boiler
2	1	32	NE	Detail shot of Flue

Trench	Film No.	Photo No.	Direction Facing	Description
2	1	33	SW	Detail shot of Chimney & Boiler
2	1	34	SSW	Chimney Elevation
2	1	35	WSW	Detail shot of Smiths & Early Quadrangle wall
n/a	1	36	n/a	FILM ID SHOT
n/a	2	1	n/a	FILM ID SHOT
3	2	2	SSW	Trench 3 Shot Yard
3	2	3	NE	Detail shot of Culvert
3	2	4	N	Trench 3 Shot Yard
3	2	5	S	Trench 3 Shot Prison Wing
3	2	6	N	Trench 3 Shot Prison Wing
3	2	7	ENE	North Wall Elevation
3	2	8	SSW	Detail shot of Furnace and Dwarf Walls
4	2	6	NW	Detail shot of Keys
4	2	10	NW	Detail shot of Keys
4	2	11	ENE	Detail shot of Well
4	2	12	SE	Trench 4 Shot
4	2	13	NNW	Trench 4 Shot
3	2	14	SW	Detail shot of Yard Surface
5	2	15	SE	Trench 5 Shot
5	2	16	NW	Trench 5 Shot
5	2	17	SE	Detail shot of Spindle
5	2	18	ENE	Detail shot of Spindle
5	2	19	SE	Detail shot of Toilet Area
5	2	20	N	East Wall Elevation
5	2	21	SW	Central Wall Elevation
5	2	22	NW	Detail shot of Central Wall and Refuse Pit
5	2	23	NE	Detail of Carved Stone (peg hole), East Wall
5	2	24	NE	Detail of Carved Stone (peg hole), East Wall
5	2	25	ENE	Central Wall Stone Elevation
5	2	26	NW	Detail shot of Flagstones
5	2	27	NW	Trench 5 South End
5	2	28	NNW	Trench 5 Centre
5	2	29	NNW	Trench 5 North End
5	2	30	WSW	Detail shot of Carved Stone (semi-circle)
5	2	31	WSW	Detail shot of Windowsill Stone
3	2	32	N	Detail shot of Culvert flagstone markings
3	2	33	N	Detail shot of Culvert flagstone markings
6	3	1	W	General trench views
6	3	2	W	General trench views
6	3	3	W	General trench views
6	3	4	W	General trench views
6	3	5	W	General trench views
6	3	6	W	General trench views
6	3	7	W	General trench views
6	3	8	W	General trench views
6	3	9	W	Main wall foundation (c6007)
6	3	10	W	Main wall foundation (c6007)
6	3	11	S	Cell area

Trench	Film No.	Photo No.	Direction Facing	Description
6	3	12	S	Cell area
6	3	13	W	Cell area
6	3	14	W	Cell area
6	3	15	N	Slate tile sump/soak-away (c6036)
6	3	16	N	Slate tile sump/soak-away (c6036)

PLATES



Plate 1 Trench 5, The Treadmill, facing NNW (© David Dodwell 2017)



Plate 2 Overview of Trench 1



Plate 3 Section where the Early Quadrangle Wall (c1013), on the left, joins the prison wing wall (c1015), on the right, characterised by a change in brick thickness and mortar. Trench 1.



Plate 4 Overview of Trench 2



Plate 5 Chimney footing (c2012) in Trench 2. Elevation with concrete base visible



Plate 6 (c2010) and boiler use deposits (c2011) in Trench 2



Plate 7 Overview of Trench 3



Plate 8 Early Quadrangle Wall (c3008) in the yard area of Trench 3.



Plate 9 Culvert (c3011) in the yard area of Trench 3



Plate 10 Overview of Trench 4



Plate 11 Section in Trench 4 sondage showing the layers of pre-prison landscaping (c4005) and the buried soil (c4006)



Plate 12 Keys disposed of within concrete during the early 20th century (c4004)

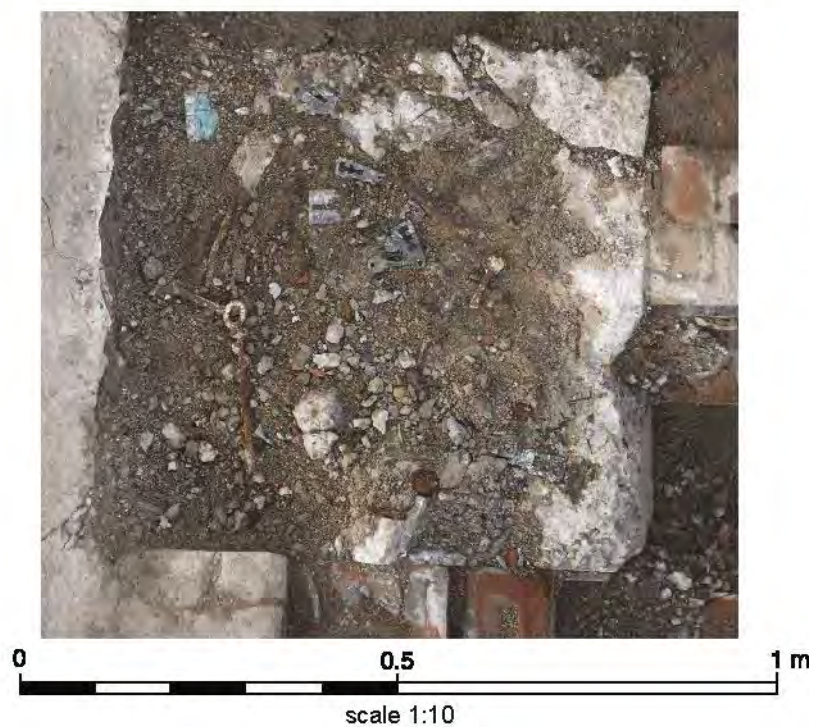


Plate 13 Image of keys produced by orthorectified photogrammetry (1:10)



Plate 14 Overview of Trench 5



Plate 15 Treadmill overview



Plate 16 Overview of Trench 6



Plate 17 Main Courthouse wall c6007 with internal walls



Plate 18 Trench 6 section with yard/path surface



Plate 19 Image of cell area produced by orthorectified photogrammetry (1:50)



Plate 21 Reused worked stone steps as a footing or cap feature within the Courthouse cell area (c6025).



Plate 20 Sump or soak-away for the Courthouse comprised of reused slate roof tiles with visible pegholes.

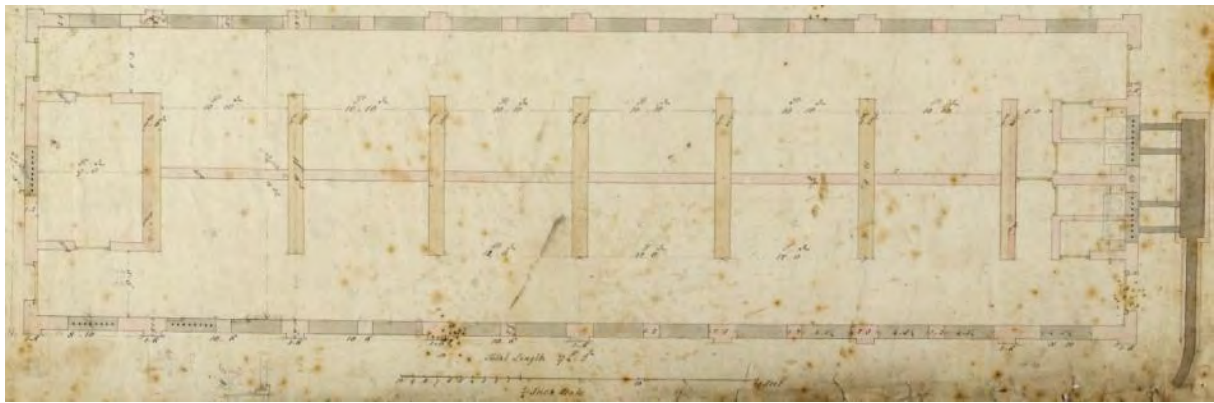


Plate 22 Detailed plan of the treadmill layout from Captain Worsely's 1849 designs for the Northallerton House of Correction



Plate 23 Detailed plan of the treadmill including the addition of the grain mill to the south. From proposed plans from 1870.



Plate 24 Aerial photograph of the prison taken in 1968. Unknown source.

FIGURES

Figure 1 Regional Site Location

Figure 2 Detail Site Location

Figure 3 Trench Locations

Figure 4 Trench 1

Figure 5 Trench 2

Figure 6 Trench 3

Figure 7 Trench 3 Section

Figure 8 Trench 4

Figure 9 Trench 5

Figure 10 Trench 6

Figure 11 Trench 6 Section

Figure 12 Trench 1, 2, 3 and 6 1838 Historical Map Overlay

Figure 13 All Trenches 1870 Historical Map Overlay

Figure 14 All Trenches 1956- early 1980s Historical Map Overlay

Figure 15 Early 19th Century Prison and Archaeological Results

Figure 16 Late 19th Century Prison and Archaeological Results



Reproduced from the Ordnance Survey Digital Mapping with the permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. York Archaeological Trust, 47 Aldwark, York, YO1 7BX. Licence Number 100018343

1:50 000

Figure. 1 Regional Site Location



Figure. 3 Trench Locations

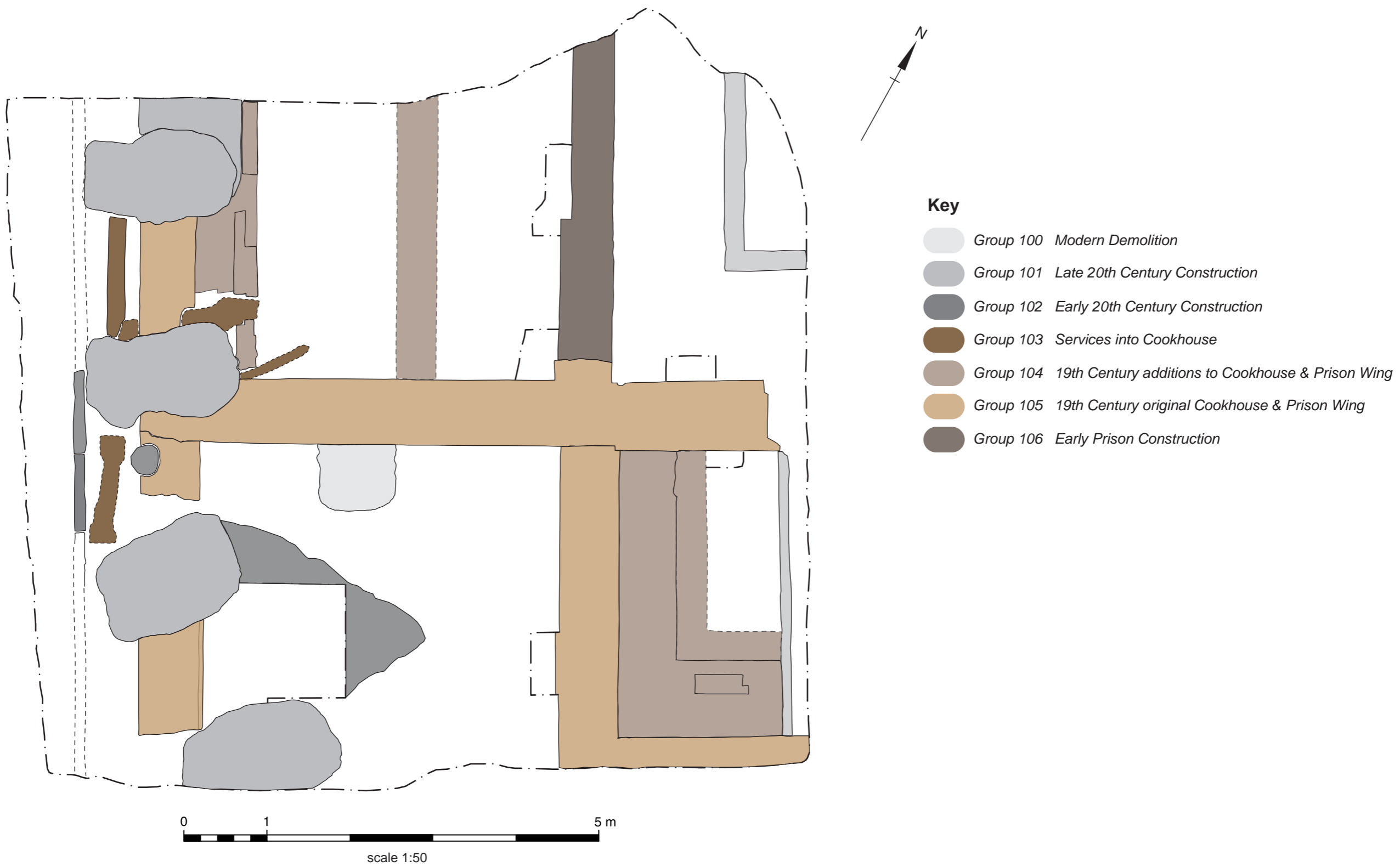
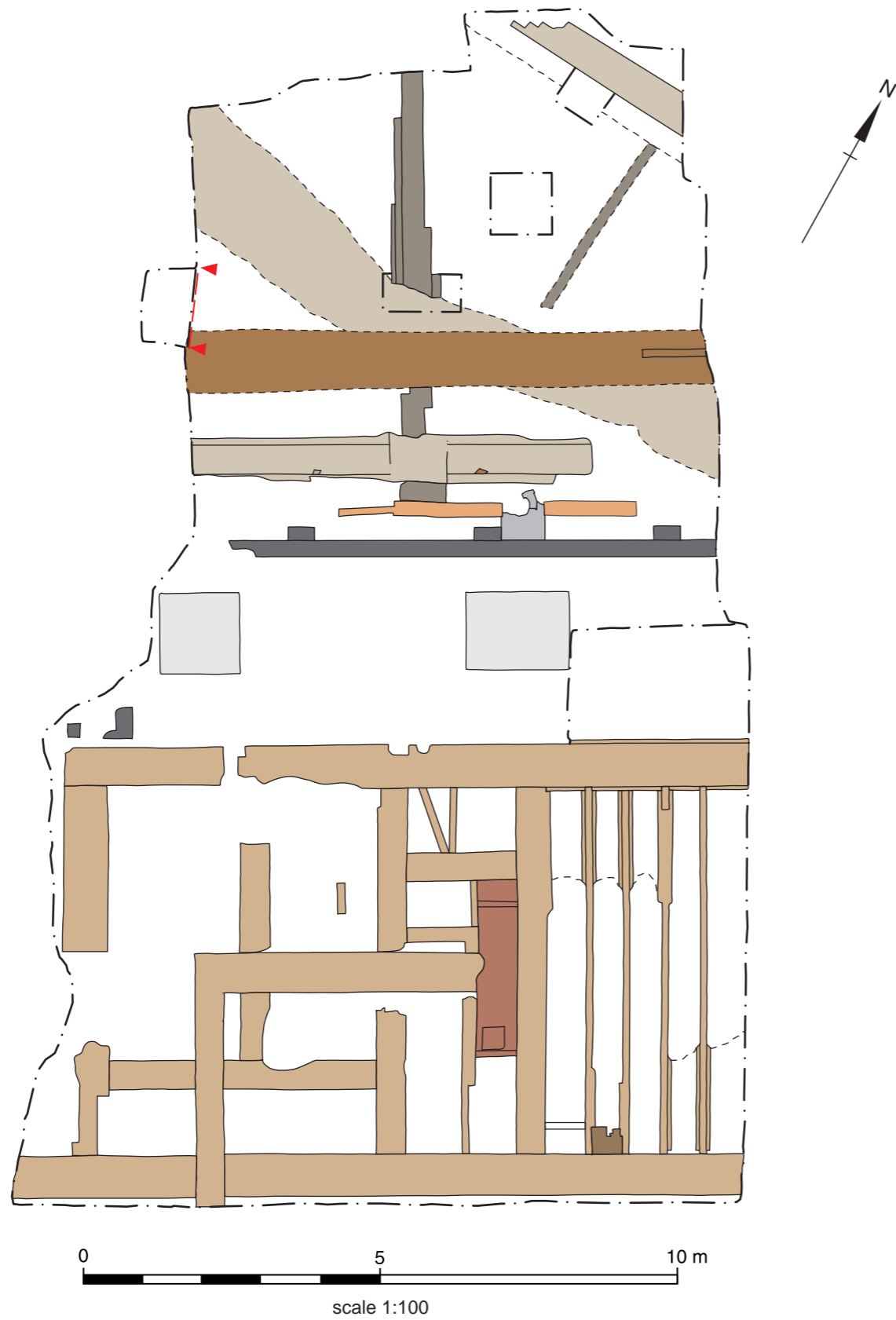


Figure. 4 Trench 1



Figure 5. Trench 2



Key

- Group 300 Modern
- Group 301 Late 20th Century Construction
- Group 302 Early 20th Century Construction
- Group 303 Late 19th Century services
- Group 304 19th and 20th Century Furnace use deposits
- Group 305 Late 19th Century Culvert, Wall & services
- Group 306 Mid 19th Century Prison Wing
- Group 307 Early 19th Century shed wall
- Group 308 Late 19th Century floor repair
- Group 309 Early Prison Construction
- ▼_▼ Trench 3 Section Location

Figure 6. Trench 3

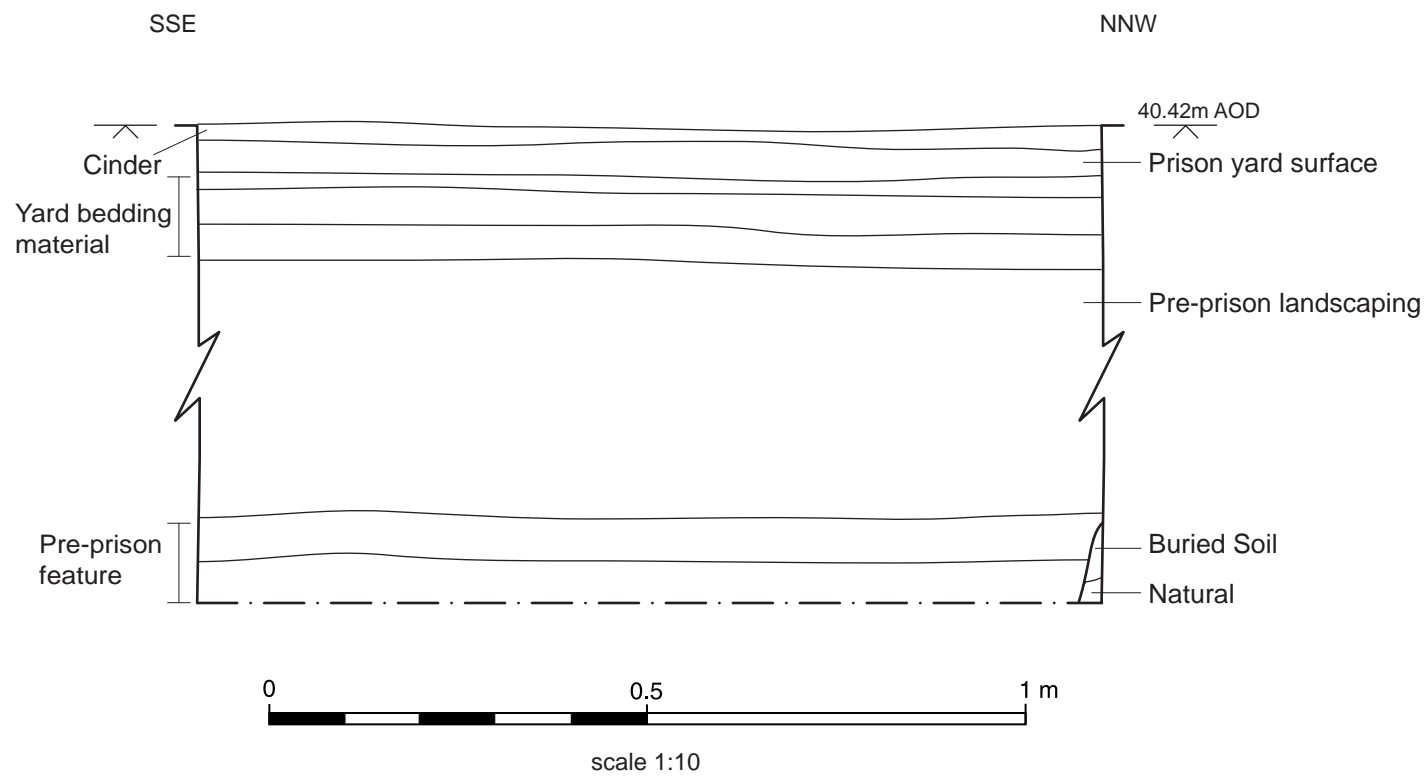
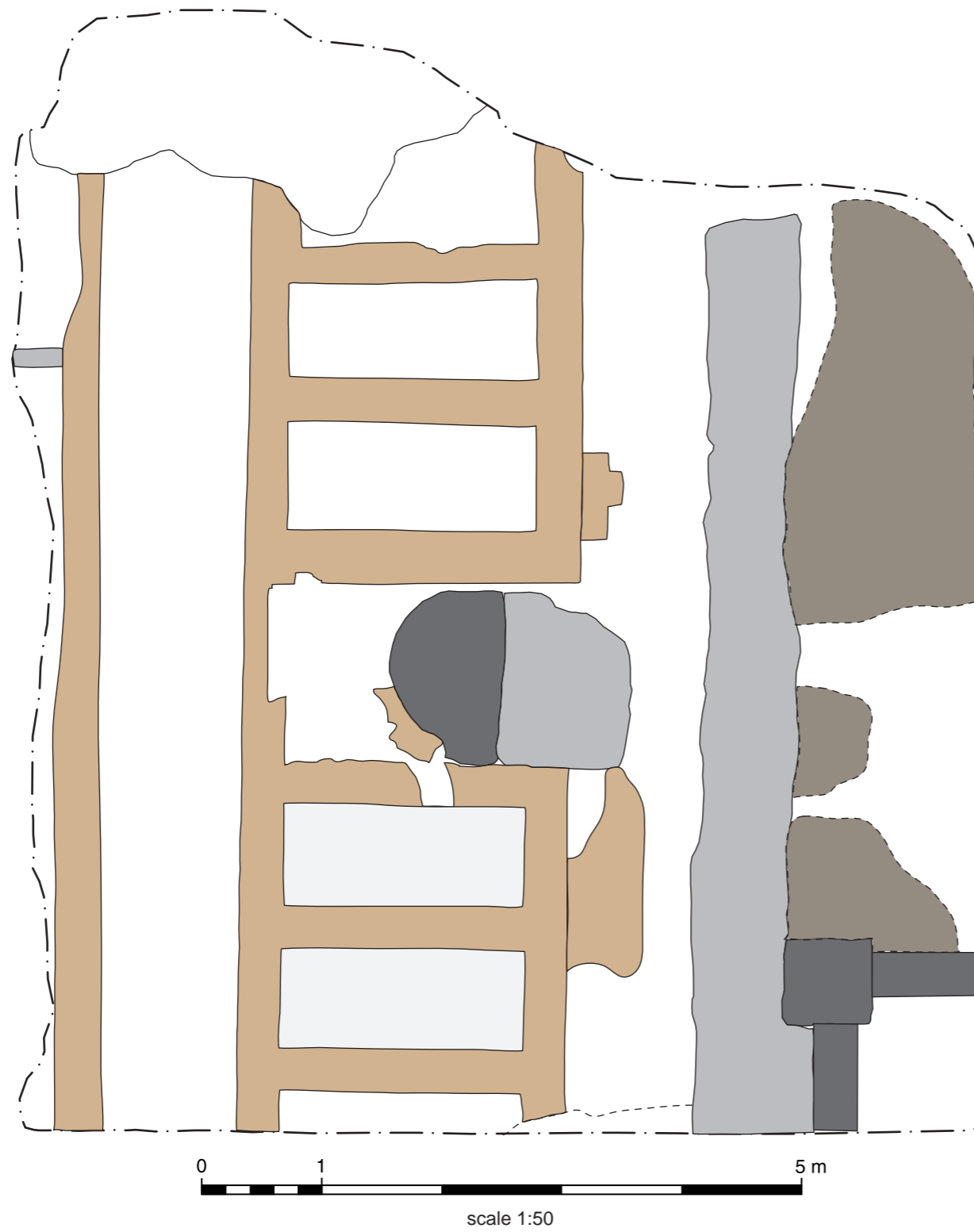


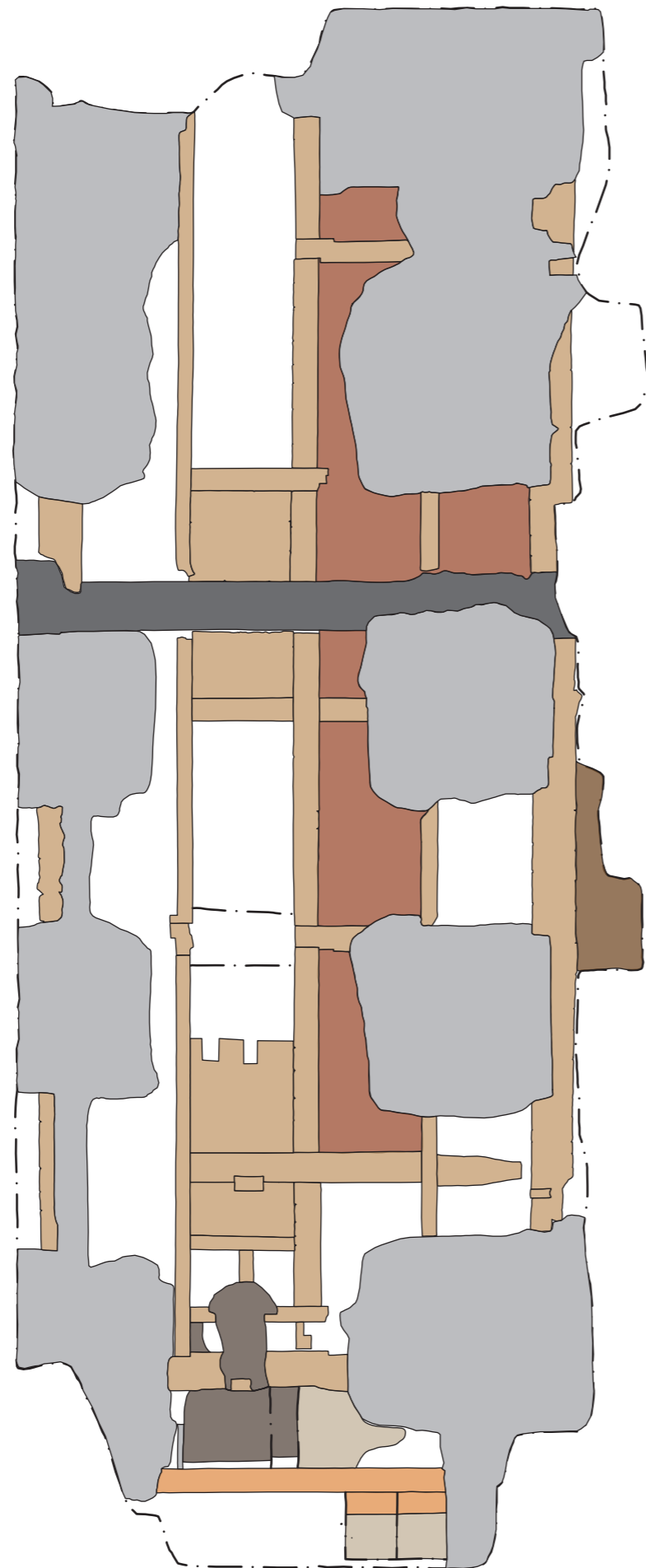
Figure 7. Section of Yard Surface in Trench 3



Key

- Group 401 Late 20th Century Construction
- Group 402 Early 20th Century Construction
- Group 403 19th Century Pumphouse
- Group 404 Late 18th Century Pre-Prison Landscaping

Figure. 8 Trench 4



Key

-  Group 501 Late 20th Century Construction
-  Group 502 Early 20th Century Construction
-  Group 503 Late 19th/Early 20th Century Post-Treadmill infilling
-  Group 504 Late 19th cinder surface
-  Group 505 Late 19th Century toilet disturbance
-  Group 506 Late 19th Century Grain Mill
-  Group 507 Late 19th Century post-treadmill construction levelling
-  Group 508 Late 19th Century Treadmill

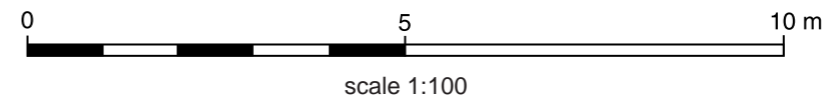
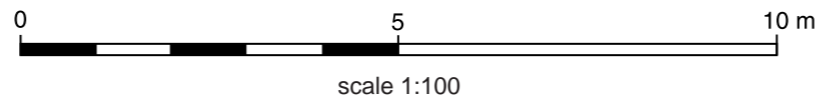
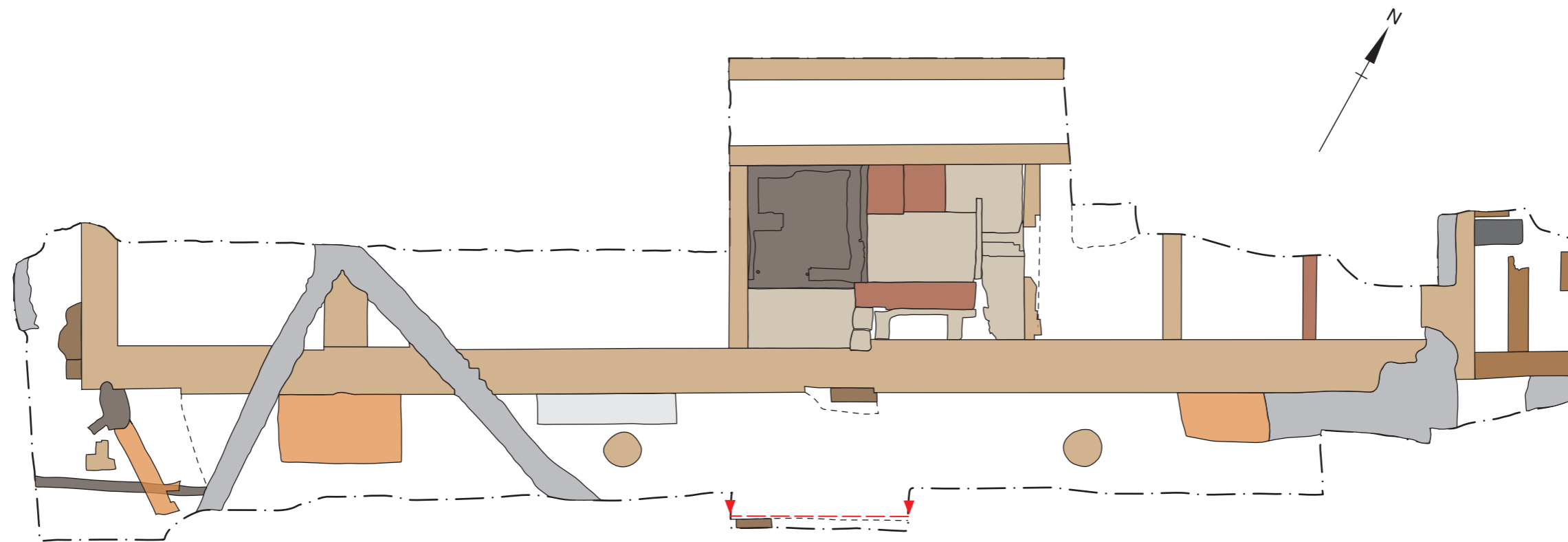


Figure. 9 Trench 5



- Key**
- Group 601 Modern Interventions
 - Group 602 Temporary Buildings and Services
 - Group 604 Ammunition Cache/dump
 - Group 605 Early 20th Century Courthouse Alterations
 - Group 606 Late 19th Century Courthouse Alterations
 - Group 607 Mid 19th Century Courthouse Service Additions
 - Group 608 Mid 19th Century Courthouse Cell
 - Group 609 Mid 19th Century Courthouse/Isolation Wing Infill
 - Group 610 External Courthouse Features
 - Group 611 Original Courthouse Wall and Construction
 - Trench 6 Section Location

Figure. 10 Trench 6

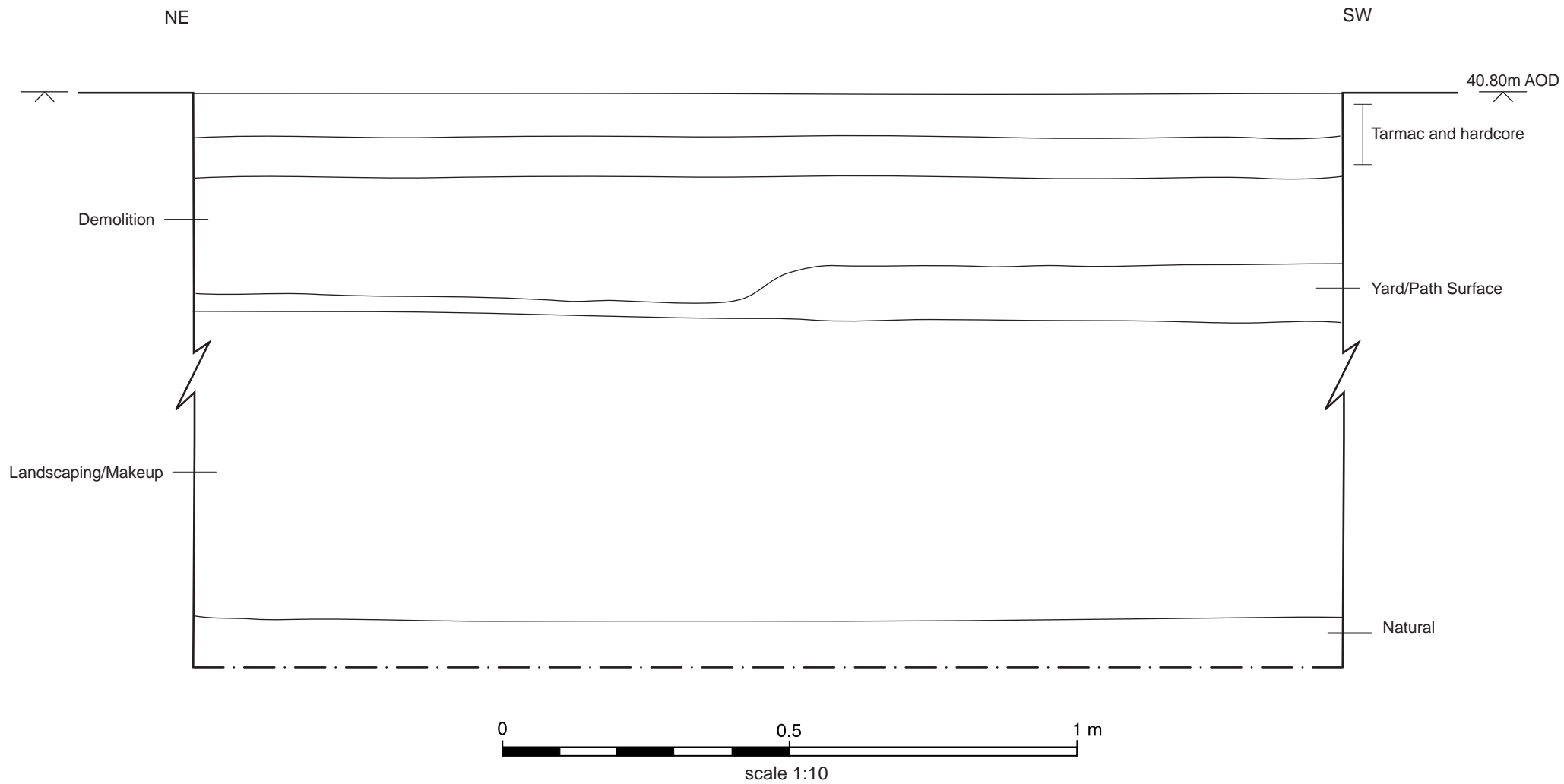
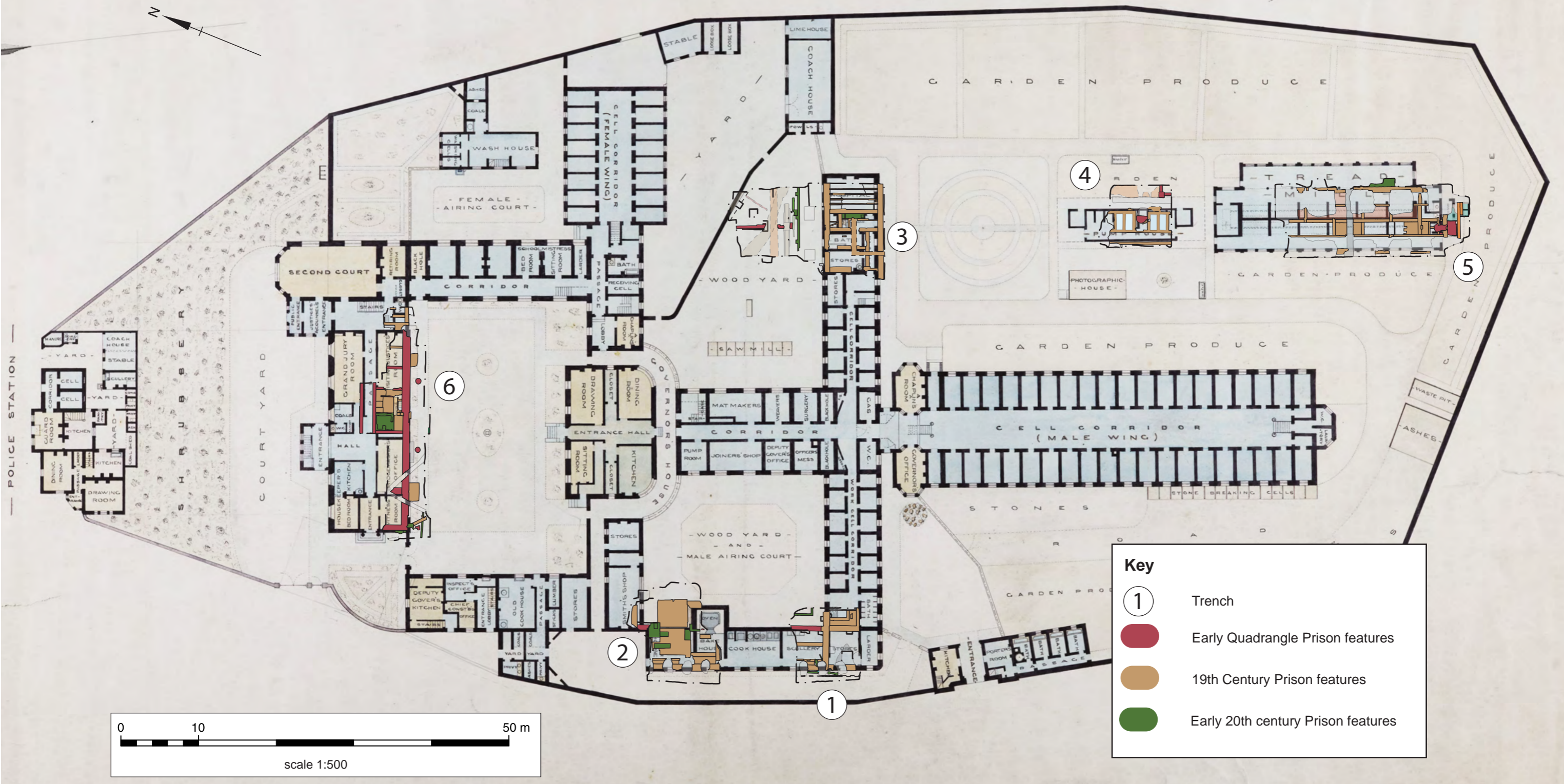


Fig. 11 Trench 6 Section with yard/path surface



Figure. 12 Trenches 1, 2, 3 and 6 1838 Historical Map Overlay

GROUND PLAN



Key

- ① Trench
- Early Quadrangle Prison features
- 19th Century Prison features
- Early 20th century Prison features

Figure. 13 All Trenches 1870 Historical Map Overlay

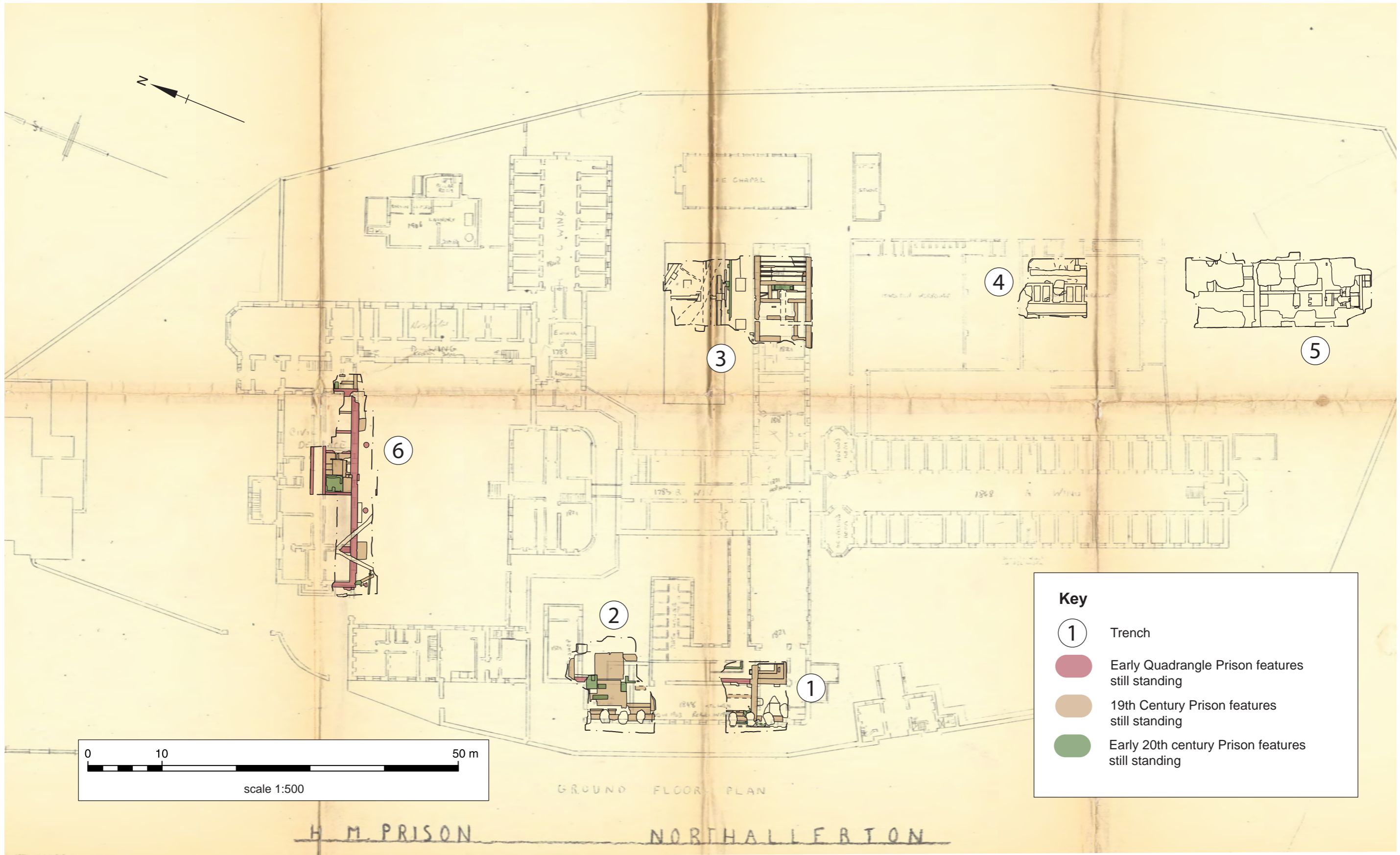


Figure. 14 All Trenches 1956-1980s Historical Map Overlay



Figure. 15 Early 19th Century Prison Extent and Archaeological Results



Figure. 16 Late 19th Century Prison Extent and Archaeological Results