FURNESS ACADEMY SOUTH CAMPUS CUMBRIA

EVALUATION REPORT

Oxford Archaeology North

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SUMMARY

Cumbria County Council requested that Oxford Archaeology North (OA North) submit proposals for an archaeological evaluation of land outlined for the proposed New Academy building, Barrow, Cumbria (Fig 1) (centred SD 2082 6988). The development area had previously been subject to a desk-based assessment, which had suggested the possible location of a hillfort there. However, it was evident that the area had been severely landscaped in the past and a further stage of assessment (December 2010) was undertaken to assess the potential of the area for evaluation trenching (OA North 2010).

Subsequently O A North were commissioned to undertake the evaluation fieldwork which took place between the 5th and the 7th of March 2012. The evaluation entailed the excavation of eight 30m x 1.8m trenches. The results were largely unsurprising in the light of the extensive landscaping and most features were of modern origin; however, Trench 5 at the southern end of the site contained a ditch of some earlier date. A radiocarbon date for the fill of the ditch gave 410-685 CalBC (2450+-30; SUERC 40258) based on an oak charcoal sample. Accepting the potential longevity of the oak prior to deposition this is likely to indicate that the ditch dates to late Iron Age or even the early Roman period. The ditch was small (1.84m wide), shallow and was orientated approximately north/south; it was potentially a boundary ditch for a field system. Also within the fill of the ditch a fragment of slag and partially-vitrified limestone which may indicate some form of metal working associated with the site.

The evaluation has established that the majority of the development area has been impacted by landscaping for the existing playing fields and that there has been extensive truncation of any potential archaeological deposits within these areas across the central part of the development area and particularly towards the north-west. Only in the extreme south-eastern part of the development area has the ground not been landscaped and in this area a significant Iron Age / Roman putative boundary ditch was identified. The location of Trench 5 is to the south-east of the proposed new build, and is an area that will potentially be subject to landscaping around what is a peripheral area of the development. While the landscaping in this relatively localised area could potentially impact on a significant archaeological resource, the main area of impact for the academy new build will not impact on an identified archaeological resource.

ACKNOWLEDGEMENTS

OA North would like to thank Suzanne Keenan, of the Cumbria County Council Resources Directorate, and Furness Academy for commissioning the work and specifically Stuart Redfern for his assistance in the course of the fieldwork.

The fieldwork was directed by Andrew Frudd, who also wrote this report, and was assisted by Paul Dunn. The drawings were produced by Anna Hodgkinson, the finds were assessed by Chris Howard Davis and the radiocarbon date was assayed by Scottish Universities Environmental Research Centre (SUERC). The project was managed by Jamie Quartermaine, and assisted by Stephen Rowland in the course of the fieldwork; Jamie Quartermaine edited this report.

1. INTRODUCTION

1.2 CIRCUMSTANCES OF THE PROJECT

1.2.1 Cumbria County Council Resources Directorate and the Furness Academy requested that Oxford Archaeology North (OA North) submit proposals for an archaeological evaluation of land outlined for a proposed New Academy building, Barrow, Cumbria (Fig 1) (centred SD 2082 6988). The development area had previously been subject to a desk-based assessment and site inspection (Gurney 2009), which had suggested the possible location of a hillfort there; however, it was evident that the area had been severely landscaped in the past and a further stage of assessment, in December 2010, was undertaken to assess the potential of the area for evaluation trenching (OA North 2010). A project design for an evaluation was submitted by OA North (Appendix 1), in accordance with a verbal brief by the Historic Environment Officer for Cumbria County Council, who also approved it.

1.2.2 Subsequently OA North were commissioned to undertake the fieldwork which took place between the 5th and the 7th of March 2012. The evaluation entailed the excavation of eight 30m x 1.8m trenches, the results of which are covered by this report.

1.3 LOCATION, TOPOGRAPHY AND GEOLOGY

1.3.1 The proposed development is centred on SD 2082 6988. The western boundary of the site is formed by Park Drive, the northern boundary by the houses along West Avenue. The eastern boundary is formed by the current Academy buildings and Lesh Lane, while the southern boundary is formed by Bridgegate Avenue.

1.3.2 The majority of the site has been heavily landscaped into wide terraces and used as playing fields; however, the south-western corner retains the original topography of the area, comprising gentle hills of boulder clay.

1.4 ARCHAEOLOGICAL BACKGROUND

1.4.1 The potential for surviving sub-surface archaeological deposits at the site is dependent upon how much of the ground has been disturbed during previous landscaping processes. Areas of archaeological potential had been highlighted upon the attached figure (Fig 1) (OA North 2010); high archaeological potential had been identified in the south-western part of the development area where the natural sloped topography has survived. In the rest of the development area terraces have been created in the hillside which have impacted upon the potential archaeological resource. Medium to Low archaeological potential has been defined in these areas in the centre of the terraces where archaeological deposits have either been cut away on the upslope side or have been deeply buried by the creation of the platform downslope. In addition, both the terraced areas and general playing fields are crossed by a great many field drains.

1.4.2 No archaeological sites were identified within the development area during the desk-based assessment (Gurney 2009), although a scattering of archaeological sites were identified

further afield from the Cumbria HER, consisting of findspots and a potential Iron Age hillfort. The present field investigation identified one new archaeological earthwork feature, a linear embanked field boundary (Site 1; Fig 1). The boundary, orientated roughly south-west/north-east, is shown on the historic OS mapping which depicts the landscape prior to the construction of Furness Academy, and comprised mainly post-medieval enclosed fields with at least five linear field boundaries crossing the development area (*ibid*). The boundary (Site 1) is the only archaeological feature on the surface to have survived the remodelling of the hillside into playing fields.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 The project design was adhered to in all respects with the exception of the trench locations (Fig 2). Five of the trench locations were adjusted slightly to accommodate previously unconsidered constraints. Trench 1 was moved north-west along its long axis by 8.5m to avoid disturbing a footpath. Trench 2 was moved 17m south-west to place it beyond the limits of the rugby pitch. Trench 3 was moved 5.5m east to avoid a footpath. Trench 6 was moved 5.5m south west to align with an existing gap in the hedge. Trench 7 was moved 3.5m south to avoid disturbing the football pitch.

2.2 TRIAL TRENCHES

2.2.1 The trenches were initially located with the use of GPS equipment which is accurate to +/- 0.03m. In some cases, as mentioned previously, it was necessary to relocate the trench.

2.2.2 The trenches were excavated by a 7.5 ton mechanical excavator fitted with a toothless ditching bucket. Turf and topsoil were removed and stored separately for reinstatement. Subsoil and modern 'made-ground' deposits were also mechanically removed to the top of the underlying natural geology. A sample 1m section of the trench stratigraphy was cleaned and photographed, except in the case of trenches 1 and 6 where the whole section was deemed important enough to record in its entirety.

2.2.3 A representative sample of the artefacts from the topsoil and made-ground deposits were recovered. All deposits were recorded either on individual record sheets or a general trench record sheet. Each trench was recorded by measured sketch plan and GPS plan. Digital, black and white, and colour slide photographs were taken of the trenches and the stratigraphy within them. Features were investigated by hand and where appropriate were recorded in detail.

2.3 FINDS AND ECOFACTS

2.3.1 The recovery of finds and sampling programmes were in accordance with current best practice (*eg* IFA 2008, and other specialist guidelines) and subject to appropriate expert advice. Handling of finds, their management and storage during and after fieldwork followed professional guidelines (IFA 2008). All artefacts recovered from the evaluation trenches were retained for assessment.

2.3.2 Samples for radiocarbon assay were taken from the fill of a linear ditch in Trench 5, and of these one was submitted for dating from context ***505*** (*Section 3.10*).

2.4 ARCHIVE

2.4.1 The results of the archaeological trenching will form the basis of a full archive to

professional standards, in accordance with current English Heritage guidelines (2006) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

2.4.2 OA North conforms to best practice in the preparation of project archives for long-term storage. It is intended that the paper archive material be deposited with Lancashire County Record Office in Preston, and a further copy of the archive can be made available for deposition in the National Archaeological Record. In addition, the Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project. The only artefact is of little archaeological significance and has been discarded. The paper archive generated from the evaluation will be transferred in accordance with the guidelines on archive transfer (AAF 2007).

3. RESULTS

3.1 TRENCH 1

3.1.1 Trench 1 was excavated to 30m x 1.8m and had a maximum depth of 0.8m (Fig 3; Plate 1). A sandy clay topsoil ***101*** containing modern plastic and ceramic material was removed by machine to a depth of 0.25m. A 'made-ground' deposit ***102*** was present across most of the trench to a maximum depth of 0.5m (Plate 2). This deposit contained ceramics of late post-medieval origin. At the north and south ends of the trench, extending for 5m and 6m respectively, was a black silty deposit ***104***, which was associated with deposit ***102*** and is most likely to be a buried soil. The natural underlying geology ***103*** was a firm yellowish-brown clay.

Plate 1: North facing shot of Trench 1

Plate2: East facing view of a sample section of Trench 1

3.1.2 Cutting in to the natural several land drains were observed, these were constructed of fairly modern ceramic field tiles with a hexagonal section and filled with gravel. These are probably associated with recent landscaping. The natural was also cut by a modern square posthole ***106***.

3.2 TRENCH 2

3.2.1 Trench 2 was excavated to 30m x 1.8m and had a maximum depth of 0.32m (Fig 4; Plate 3). Silty topsoil ***201*** was removed to a maximum depth of 0.2m by machine, and below this was the underlying natural geology ***202***, a reddish brown firm clay. This deposit was cut by five parallel field drains running north-south.

3.2.2 No archaeological remains were observed as the ground level had been reduced by terracing in this location; the drains relate to this landscaping event.

Plate 3: South-west facing view of Trench 2

3.3 TRENCH 3

3.3.1 Trench 3 was excavated to 30m x 1.8m and a maximum depth of 0.3m (Fig 4; Plate 4). Silty topsoil ***301*** was removed to a depth of 0.2m by machine; below this was the underlying natural geology, ***302***, a reddish brown firm clay. This deposit was cut by three parallel field drains running north/west to south/east. No archaeological remains were observed.

Plate 4: North-west facing view of Trench 3

3.4 TRENCH 4

3.4.1 Trench 4 was excavated to 30m x 1.8m and a maximum depth of 0.6m (Fig 4; Plate 5). Silty topsoil ***401*** was removed by machine to a maximum depth of 0.3m. A mid grey silty clay subsoil ***402*** was then removed to a maximum depth of 0.2m. A quantity of ceramic and glass fragments were collected from this deposit. The underlying natural geology ***403*** was a reddish orange firm clay, which was cut by three field drains.

3.4.2 At the northern end of the trench for *c* 3m was a very modern deposit containing rubbish, and was just below the topsoil. No archaeological features were observed within the trench.

Plate 5: South facing view of Trench 4

3.5 TRENCH 5

3.5.1 Trench 5 was excavated to 30m x 1.8m and had a maximum depth of 0.3m (Fig 5; Plate 6). Silty topsoil ***501*** was removed to a depth of 0.25m by machine. The underlying natural geology was a firm reddish orange clay ***504***. This deposit was cut by six north/south aligned land drains, one of which truncated linear feature ***503***.

3.5.2 The linear feature ***503*** measured >1.8m x 1.84m wide and was 0.46m deep (Fig 5; Plate 7). It was aligned roughly north-north-east by south-south-west and was truncated on its western side by ceramic land drain ***506***. It was filled by deposits ***502*** and ***505***, the former being a mid-greyish brown sandy clay with occasional charcoal flecks and the latter a mid pinkish-grey clay which contained a fragment of stone which was vitrified on one side. No finds were recovered from the ditch fills; palaeoenvironmental samples were taken from both deposits, of which one, from context ***505***, was submitted for radiocarbon assay.

Plate 6: South-east facing view of Trench 5

*Plate 7: North-east facing view of ditch **503***

3.6 TRENCH 6

3.6.1 Trench 6 was excavated to 30m x 1.8m and had a maximum depth of 1m (Fig 6; Plate 8). Sandy clay topsoil ***601*** was removed to a maximum depth of 0.45m by machine. As this trench was excavated across a ditch and bank type field boundary the deposits varied along the length of the trench. The field on the northern side of the boundary had been landscaped, and the natural, ***606,*** was revealed directly below the topsoil and was cut by two field drains, one ceramic, one plastic, that followed the boundary line. Between 7m and 9m from the northern end of the trench clay deposit ***604*** was on top of a truncated edge of ***607***, the natural sandy silt (Fig 6; Plate 9).

Plate 8: North-east facing view of Trench 6

3.6.2 On the south side of the field boundary there was a significant deposit, ***602***, of a red-brown clay made-ground, which was up to 0.5m thick. This overlay buried topsoil ***603*** which contained fairly modern post-medieval ceramics. Deposit ***603,*** and possibly ***602*** as well, was a large ceramic drain running with water, which was presumably fed by the smaller drains in the area. At that southern end of the trench the underlying natural, ***605*** was a red-brown firm clay.

3.6.3 The bank of the field boundary consisted of deposits ***608*** and ***607***. Deposit ***608*** was a pale silty sand, probably a subsoil, suggesting the gradual build up of the bank, while deposit ***607*** was a light-grey-brown sandy silt natural deposit.

3.6.4 On either side of the bank was a shallow ditch; that on the northern side, ***610***, was filled with deposit ***609***, and was a mixture of humic material and modern litter; it was in reality an 'extension' of the topsoil. The southern ditch, ***612***, was filled by deposit ***611***, which was a mid-grey sandy silt.

*Plate 9: East facing view of section showing deposit **604** against the truncated bank edge, **607***

3.6.5 No dating evidence beyond the modern materials mentioned were recovered from the features in this trench.

3.7 TRENCH 7

3.7.1 Trench 7 was excavated to 30m x 1.8m and had a maximum depth of 0.4m (Fig 7; Plate 10). Silty topsoil ***701*** was removed to a maximum depth of 0.2m by machine. The underlying natural geology was a reddish-brown firm clay ***702***. There was some plough scar type damage on an east/west alignment which probably relates to the landscaping. The natural was also cut by six field drains that were aligned north/south.

Plate 10: West facing view of Trench 7

3.7.2 There was no archaeology observed in the trench; it is within the area of landscaping and has been heavily truncated.

3.8 TRENCH 8

3.8.1 Trench 8 was excavated to 30m x 1.8m and had a maximum depth of 1.1m (Fig 7; Plate 11). Silty sand topsoil ***801*** was removed by machine to a maximum depth of 0.2m. A made-ground deposit, ***802,*** of coarse, buff sand extended for 5m from the eastern end of the trench. Below this was a 0.3m thick deposit of redeposited red-brown clay, ***803***, thinning to the west. The underlying natural geology, ***804*** was a reddish-brown clay.

Plate 11: West facing view of Trench 8

3.8.2 No archaeology was observed in this trench; however, the made-ground at the eastern end was very deep and may have been a large service trench.

3.9 FINDS RESULTS

3.9.1 In all, 195 fragments of artefacts and ecofacts were recovered during the investigation, and their distribution is shown below (Table 1). Pottery and glass comprise most of the artefacts, although there are also small amounts of metalwork, industrial debris, and a single fragment of bone, and a detailed breakdown of the assemblage is presented in *Appendix 3*.

Context	Pottery	Glass	Building	Iron	Ind. debris	Other	Total
101	10	2	2	1			*15*
103	17	6	2	1			*26*
104			3	1			*4*
105	1						*1*
107	1				1		*2*
201	16	16		2			*34*

Tr2 modern	3						*3*
301	21	21	2		1		*45*
401	9	8	1			1	*19*
402	2	5					*7*
Tr4 modern	4	1	1				*6*
501	1	4					*5*
505					1		*1*
701	10	8					*18*
802					2		*2*
803	4	2	1				*7*
Totals	*99*	*73*	*12*	*5*	*5*	*1*	***195***

Table 1: distribution of artefacts and ecofacts by context

3.9.2 Pottery forms by far the largest component of the assemblage. There is only a single fragment of pottery earlier than the nineteenth century, being a small and heat-affected fragment of white salt-glazed stoneware with a painted design, probably dating to the mid-eighteenth century, from context ***105***. The overwhelming majority of the pottery is, however, of late date, being no earlier than the late nineteenth century and possibly more recent. The vessels represented comprise a limited range of well-known kitchen and tablewares, with nothing of particular interest.

3.9.3 The large group of glass vessels and window glass is undoubtedly of the same date range, most probably being no earlier than the last two decades of the nineteenth century, and comprising machine-blown bottles of various kinds, and sheet glass. None of the ironwork is of archaeological significance. Industrial debris, probably deriving from iron-production in the locality, for which Barrow is well known, comes from contexts ***107***, ***301***, ***505***, and ***802***. Only that from ditch fill ***505*** is potentially of interest, being what appears to be a fragment of partially-vitrified limestone with slaggy material adhering, suggesting that it derives from a nearby structure, perhaps associated with iron-production by the bloomery method.

3.10 RADIOCARBON ASSAY

3.10.1 A single sample from the lower ditch fill, **505**, of ditch **503** was submitted for radiocarbon assay. This was a fragment of oak charcoal that was dry-sifted from a two litre soil sample. The date is 410-685 CalBC (2450+-30; SUERC 40258), and would suggest an Iron Age date for the wood. The date of the sample relates to when the sample of wood was formed and being oak, a tree that can have considerable longevity, the formation date can vary considerably from the subsequent felling date. Thus although the date is mid Iron Age there is the potential that the felling date and the date at which the wood was burnt to form charcoal, was some many hundreds of years later.

4. DISCUSSION

4.1 DISCUSSION

4.1.1 ***Truncation:*** Trenches 2, 3, 7 and the northern end of Trench 6 have all been negatively affected by the landscaping which created the terraces for the school playing fields (Fig 2). The dark-reddish-brown colour of the underlying clay suggests that the upper weathered surface has been truncated. As such it is unsurprising that there were no remains of an archaeological nature in these trenches.

4.1.2 Trenches 1, 8 and the northern end of Trench 6 have been affected by the landscaping to varying degrees, allowing some localised survival; this is most striking in Trench 6 where there was a buried topsoil identified (***603***). Despite this preservation there were no remains of archaeological significance in any of these trenches.

4.1.3 ***Trench 5:*** the area around Trenches 4 and 5 seems not to have been subject to the extensive landscaping seen elsewhere and the area has the potential for the survival of early features, that are not seen elsewhere across the development area. The linear feature in Trench 5 was most notable for its lack of modern finds, which can be an indication of antiquity, and this was strongly reinforced by the radiocarbon date of 410-685 CalBC (2450+-30; SUERC 40258) from the primary fill of the ditch, ***505*** (Fig 5). Given that the sample was oak charcoal, which may result in a substantial time differential between the formation of the wood and its subsequent deposition as charcoal, this is likely to indicate that the ditch dates to the late Iron Age or even the early Roman period. The ditch is small (1.84m wide), shallow and was orientated approximately north/south; it was potentially a boundary ditch for a field system and if so would suggest a contemporary settlement in the environs. However, such field systems have the potential to be fairly extensive (Quartermaine and Leech 2012; OA North 2009; Smith 1978) and the existence of the boundary ditch does not necessarily indicate that the parent settlement was either adjacent to the Trench 5 location, or within the extent of the development. The presence of a fragment of slag and partially-vitrified limestone (*Section 3.9.3*) suggests that there was some form of metal working associated with this site, and this may, however, be an indication that the parent settlement was not too remote from the ditch.

4.1.4 Iron Age or Roman field systems have been identified in Cumbria, most notably from the uplands of Cumbria, where there is good site visibility and good survival conditions. These include the co-axial field system of Asby Common (OA North 2009), where the boundaries extend across a large area that is over 1.25km in extent, and the Brantrake settlement and field system in West Cumbria (Quartermaine and Leech 2012, 211-7) which is dated broadly to the Roman period. These, however, relate to a predominantly pastoral economy and are inevitably distinct in character from those of the lowlands that relate to a predominantly arable economy. Examples of lowland Romano-British / Iron Age field systems are still relatively rare and this reflects a general low site visibility, and that there has been relatively little opportunity to explore these field systems by excavation. A particular issue, highlighted by the identification of this ditch, is that there is little to distinguish it, and other contemporary features, from boundary ditches of subsequent

periods; the only indicator that these features are of an early date is the absence of artefacts and the corresponding use of radiocarbon dating. Prior to the common usage of radiocarbon assay there was little definitive to indicate the chronology of these ditches and many may have been overlooked in the course of excavations and evaluations across the county. One of the relatively few examples where an Iron Age / Romano-British field system has been identified was at Tarraby Lane, Stanwix, near Carlisle, where extensive parallel field boundaries were found to be overlain by Hadrian's Wall and this indicated an Iron Age or early Roman date (Smith 1978). An evaluation at Lancaster University (OA North 2002) revealed an unremarkable ditch with no artefacts in an area that had considerable numbers of boundary ditches, but with substantial amounts of nineteenth century pottery. Its early date, suggested by the absence of artefacts, was tested by radiocarbon assay, and the ditch was found to date to the Roman period. Further investigation revealed that it was associated with a Romano-British settlement comprising two round houses (OA North 2004).

4.2 IMPACT

4.2.1 The evaluation has established that the majority of the development area has been impacted by landscaping for the existing playing fields and that there has been extensive truncation of any potential archaeological deposits within these areas across the central part of the development and particularly towards the north-west. No significant archaeological features have been identified within these areas. Only in the extreme south-eastern part of the development area has the ground not been landscaped and in this area a significant Iron Age / Roman putative boundary ditch was identified. The location of Trench 5 is to the south-east of the proposed new build, and is an area that will potentially be subject to landscaping around what is a peripheral area of the development. While the landscaping in this relatively localised area could potentially impact on a significant archaeological resource, the main area of impact for the academy new build will not impact on an identified archaeological resource.

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APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Capita Symonds (hereafter the 'client') has requested that Oxford Archaeology North (OA North) submit proposals for an archaeological evaluation of land outlined for the proposed New Academy building, Barrow, Cumbria (Fig 1) (centred SD 2082 6988). The development area had previously been subject to a desk-based assessment and site inspection (Gurney 2009), which had suggested the possible location of a hillfort there. However, it was evident that the area had been severely landscaped in the past and a further stage of assessment (December 2010) was undertaken to assess the potential of the area for evaluation trenching (OA North 2010). The present evaluation proposals are based upon the recommendations of that second assessment, which entails the excavation of seven 30m x 2m trenches.

1.2 ARCHAEOLOGICAL POTENTIAL

1.2.1 The potential for surviving sub-surface archaeological deposits at the site is dependent upon how much of the ground has been disturbed during the previous landscaping processes. Areas of archaeological potential have been highlighted upon the attached figure (Fig 1). High archaeological potential has been identified in the north-west of the development area where the natural sloped topography has survived. In the rest of the development area terraces have been created in the hillside which have impacted upon the potential archaeological resource. Medium to Low archaeological potential has been defined in these areas in the centre of the terraces where archaeological deposits have either been cut away on the upslope side or have been deeply buried by the creation of the platform downslope. In addition, both the terraced areas and general playing fields are crossed by a great many field drains.

1.2.2 No archaeological sites were identified within the development area during the desk-based assessment (Gurney 2009). A scattering of archaeological sites were identified from the Cumbria HER, consisting of findspots and a potential Iron Age hillfort. The present field investigation identified one new archaeological earthwork feature, a linear embanked field boundary (Site 1; Fig 1). The boundary, orientated roughly south-west/north-east, is shown on the historic OS mapping which depicts the landscape prior to the construction of Furness Academy. The landscape was primarily of Post-Medieval enclosed fields with at least five linear field boundaries crossing the development area (*ibid*). The boundary is the only visible archaeological feature to have survived the remodelling of the hillside into playing fields.

1.3 OXFORD ARCHAEOLOGY NORTH

1.3.1 OA North has considerable experience of the assessment of sites of all periods, having undertaken a great number of small and large-scale projects. Such projects have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.3.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists **(IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct (1994).

2 AIMS AND OBJECTIVES

2.1 The main aim of the investigation will be to characterise the level of preservation and significance of any buried archaeological remains surviving *in situ* within the site. The work will evaluate the archaeological resource and potential for further archaeological deposits, in order to determine their extent and nature of the remains that may be threatened by the proposed development. The results will provide information as to whether further investigation or mitigation work is necessary prior to the development taking place. To this

end, the following programme has been designed.

2.2 ***Trenching Proposals:*** it is envisaged that the potential sub-surface archaeological resource be subject to a scheme of evaluation consisting of targeted trial trenching within those parts of the development area where potential archaeological survival coincides with the footprint of proposed destructive groundworks (Fig 2). All such areas of possible surviving sub-surface archaeological deposits, measuring 21,549 m² in total extent, were determined to be of Medium to Low archaeological potential and are located in the terraced areas on the south and eastern part of the development area. It is proposed that a 2% sample of these areas would be adequate to assess the sub-surface archaeological resource, requiring the excavation of seven 30m x 2m trenches (Fig 2). One trench will be excavated perpendicularly across an historic field boundary (Site 1) in order to record its profile. A further trench will be excavated at the north-western area of the site, adjacent to existing tennis courts, which will be subject to landscaping. A suggested trenching scheme has avoided areas outside of the footprint of destructive groundworks, areas of vegetation cover, heavily disturbed ground and areas where the original ground surface has been deeply covered by made-ground.

2.3 ***Report and Archive:*** a written report will assess the significance of the data generated by this programme within a local and regional context. It will present the results of the evaluation in accordance with the CCCHES brief. The report will be produced for the client within eight weeks, unless a report submission deadline is agreed with the client at the time of commission. An archive will be produced to English Heritage guidelines (MAP 2 (1991)).

3. METHOD STATEMENT

3.1 EVALUATION TRENCHING

3.1.1 ***Introduction:*** the programme of trial trenching will establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample the development area and assess whether any further work will be required on site prior to extraction.

3.1.2 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991) and the IFA's code of conduct.

3.1.3 ***Trenching Strategy:*** the evaluation will entail the excavation of eight trenches measuring 30m in length and all 1.8m wide (the average width of a ditching bucket), and the layout is as proposed in Fig 1.

3.1.4 ***Methodology:*** the topsoil will be removed by machine (fitted with a toothless ditching bucket). All such work will be undertaken under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All trenches will be excavated in a stratigraphical manner, whether by machine or by hand.

3.1.5 The trenches will not be excavated deeper than 1.25m to accommodate health and safety constraints, without shoring or stepping out of the trench sides. Should this be required, this may be costed as a variation should additional days on site be necessary.

3.1.6 All features of archaeological interest will be investigated and recorded unless otherwise agreed by CCCHES. Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.

3.1.7 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, colour slides and monochrome contacts) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.1.8 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.1.9 Trenches will be located by use of GPS equipment which is accurate to +/- 0.03m, altitude information will be established with respect to Ordnance Survey Datum. This information will be plotted onto an updated digital plan (dwg) of the extraction area provided by the client.

3.1.10 ***Access:*** liaison for basic site access will be undertaken through the client and it is understood that there will be access for both pedestrian and vehicular traffic to the site. Should there be any unforeseen delays resulting from access difficulties beyond the control of OA North a stand down rate will be charged.

3.1.11 ***Reinstatement:*** it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine. Should there be a requirement by the client other than that stated this will involve recosting.

3.1.12 ***Fencing requirements:*** the trenches will be protected during the course of the evaluation using plastic mesh fencing. However, if the client deems this as not suitable OA North must be informed prior to commencement of site works. Consequently, should heras fencing or similar be required this will be costed as a variation.

3.1.13 ***Environmental Sampling:*** environmental samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified.

3.1.14 Advice will also be sought as to whether a soil micromorphological study or any other analytical techniques will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis will be provided as a variation.

3.1.15 ***Faunal remains:*** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.

3.1.16 ***Human Remains****:* any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Such removal may also require costing as a variation, the amount of which will be made in agreement with the client.

3.1.17 ***Treatment of finds:*** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.

3.1.18 ***Treasure:*** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

3.1.19 All identified finds and artefacts will be retained, although certain classes of building material can sometimes

be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.

3.1.20 ***Contingency plan:*** a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.

3.1.21 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

3.2 REPORT

3.2.1 Initially, a pdf version of the draft report will be submitted to the client for approval within eight weeks of completion. Upon client agreement, one bound and one unbound copy of the finalised report will be submitted to the client, and a further three copies submitted to the Cumbria HER. Any additional draft submissions and amendments may require recosting as a variation.

3.2.2 The report will be in accordance with the CCCHES brief and will include;

- a site location plan related to the national grid
- a front cover to include the planning application number and the NGR
- the dates on which the fieldwork was undertaken
- a concise, non-technical summary of the results
- an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken
- a description of the methodology employed, work undertaken and results obtained
- plans and sections at an appropriate scale showing the location and position of deposits and finds located
- a list of and dates for any finds recovered and a description and interpretation of the deposits identified
- a description of any environmental or other specialist work undertaken and the results obtained
- a copy of this project design, and indications of any agreed departure from that design
- the report will also include a complete bibliography of sources from which data has been derived.

3.2.3 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required.

3.2.4 The Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3.2.5 ***Confidentiality:*** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.2.6 ***Further Archaeological Works:*** in the event that significant archaeological features are identified in the course of the evaluation, there may be a requirement further archaeological works typically entailing mitigative excavation. Following on from that would be a process of archaeological post-excavation and assessment, the production of an archive report, and the submission of publication in a suitable journal in accordance with guidance from CCCHES. It must be noted that as per normal CCCHES policy, recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation will **not** be included in the evaluation report, although this may be outlined to the client and CCCHES in a separate communication.

3.3 ARCHIVE

3.3.1 The archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria HER (the index to the archive and a copy of the report). OA North will deposit the original record archive of projects with the Whitehaven Record Office.

3.3.2 All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.

3.3.3 The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum. CCCHES will be notified of the arrangements made.

4. OTHER MATTERS

4.1 HEALTH AND SAFETY

4.1.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.

4.1.2 Full regard will, of course, be given to all constraints (services etc) during the watching brief as well as to all Health and Safety considerations. As a matter of course the Unit uses a Cable Avoidance Tool (CAT) prior to any excavation to test for services. However, this is not fool-proof and **it is assumed that the client will provide any available information regarding services within the study area**.

4.1.3 A portable toilet with hand washing facilities, and a messing facility/laying out space will be provided during the archaeological works.

4.1.4 The costs assume provide for a wheeled JCB 3cx type of mechanical excavator.

4.2 PROJECT MONITORING

4.2.1 Whilst the work is undertaken for the client, the Historic Environment Officer, working on behalf of the Local Planning Authority, will be kept fully informed of the work and its results and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCHES in consultation with the client.

4.3 WORK TIMETABLE

4.3.1 ***Evaluation Trenching:*** approximately two days will be required to complete this element with a team of three people.

4.3.2 ***Report:*** the report will be produced following the completion of all the fieldwork. A draft report will be submitted within eight weeks of completion of the fieldwork for approval by the client. A final version will be submitted within two weeks of receipt of detail of amendments.

4.3.3 ***Archive:*** the archive will be deposited within six months.

4.3.4 OA North requires a formal written agreement or order, subsequent to which the work can be scheduled. Due to present commitments at least two weeks notice is necessary.

4.4 STAFFING

4.4.1 The project will be under the direct management of **Jamie Quartermaine BA (Hons) Surv Dip MIFA** (OA North senior project manager) to whom all correspondence should be addressed.

4.4.2 All elements of the assessment will be supervised by either an OA North project officer or supervisor experienced in this type of project, and assisted by two OA North project assistants. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and

supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

4.4.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North finds manager). Christine has extensive knowledge of finds from many periods.

4.4.4 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North environmental manager). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

4.5 INSURANCE

4.5.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

APPENDIX 2 CONTEXT INDEX

Context Number	Context Location	Description
101	Trench 1	Topsoil
102	Trench 1	Made ground - red clay
103	Trench 1	Natural - yellow / brown clay
104	Trench 1	Made ground - black silt
105	Trench 1	Fill of posthole (106)
106	Trench 1	Modern posthole
107	Trench 1	Field drain
201	Trench 2	Topsoil
202	Trench 2	Natural
301	Trench 3	Topsoil
302	Trench 3	Natural
401	Trench 4	Topsoil
402	Trench 4	Subsoil
403	Trench 4	Natural
501	Trench 5	Topsoil
502	Trench 5	Upper fill of 503
503	Trench 5	Ditch
504	Trench 5	Natural
505	Trench 5	Lower fill of 503
506	Trench 5	Drain
601	Trench 6	Topsoil
602	Trench 6	Red clay made ground, south end
603	Trench 6	Buried soil
604	Trench 6	Red clay made ground, north end
605	Trench 6	Red/brown clay, natural, south end
606	Trench 6	Red/brown clay, natural, north end
607	Trench 6	Brown silt, natural
608	Trench 6	Bank / mound
609	Trench 6	North ditch fill
610	Trench 6	North ditch cut
611	Trench 6	South ditch fill
612	Trench 6	South ditch cut
701	Trench 7	Topsoil
702	Trench 7	Natural
801	Trench 8	Topsoil
802	Trench 8	Sand made ground
803	Trench 8	Clay made ground
804	Trench 8	Natural

APPENDIX 3: FINDS CATALOGUE

Trench	Context	Material	Category	No	Description	Period
1	101	Ceramic	building material	1	Brown salt-glazed sanitary pipe.	Nineteenth-century on
1	101	Ceramic	building material	1	Glazed wall-tile, Art Nouveau	Nineteenth-century on
1	101	Ceramic	vessel	2	Late grey stoneware	l Nineteenth-century on
1	101	Ceramic	vessel	1	Body fragment white- slipped redware.	Nineteenth-century on
1	101	Ceramic	vessel	1	Rim fragment late brown stoneware.	Nineteenth-century on
1	101	Ceramic	vessel	5	Body fragments refined white earthenware.	Nineteenth-century on
1	101	Ceramic	vessel	1	One body fragment black and white underglaze transfer- printed white earthenware.	Nineteenth-century on
1	101	Glass	window	1	Mid-pane fragment colourless window.	Nineteenth-century on
1	101	Glass	vessel	1	Body fragment dark green bottle.	Late nineteenth-century on
1	101	Iron	object	1	Featureless strip.	Not closely dated
1	103	Ceramic	building material	2	Small fragments glazed wall tile.	Nineteenth-century on
1	103	Ceramic	vessel	1	Body fragment dark blue moulded machine- blown bottle.	Nineteenth-century on
1	103	Ceramic	vessel	6	Rim and body fragments late grey stoneware jars.	Nineteenth-century on
1	103	Ceramic	vessel	1	Rim fragment greyish refined white earthenware cup.	Nineteenth-century on
1	103	Ceramic	vessel	1	Body fragment moulded vessel with dark blue glaze.	Nineteenth-century on
1	103	Ceramic	vessel	1	Body fragment industrial slipware.	Nineteenth-century on
1	103	Ceramic	vessel	1	One body fragment blue and white underglaze transfer-printed white earthenware.	Nineteenth-century on
1	103	Ceramic	vessel	6	Rim and body fragments refined white earthenwares, one with painted green edge.	Nineteenth-century on
1	103	Glass	vessel	1	Base fragment moulded opaque white glass.	Nineteenth-century on
1	103	Glass	vessel	3	Body fragments greenish machine-blown bottles.	Nineteenth-century on
1	103	Glass	vessel	2	Body fragments dark green machine-blown bottles.	Nineteenth-century on
1	103	Iron	object	1	Fragment of strap	Nineteenth-century on
1	104	Ceramic	building material	2	Green-glazed wall tile.	Nineteenth-century on
1	104	Ceramic	building material	1	Polychrome transfer- printed wall-tile.	Nineteenth-century on
1	104	Iron	nail	1	Nail or bar	Nineteenth-century on
1	105	Ceramic	vessel	1	Small burnt fragment painted white	C18

					salt-glazed stoneware.	
1	107	Ceramic	vessel	1	Body fragment refined white earthenware.	Nineteenth-century on
1	107	Ind debris		5	Iron-making slag?	Not closely dated
2	201	Ceramic	vessel	2	Rim and body fragments late grey stoneware jars.	Nineteenth-century on
2	201	Ceramic	vessel	1	Body fragment industrial slipware.	Nineteenth-century on
2	201	Ceramic	vessel	1	One body fragment green and white underglaze transfer- printed white earthenware.	Nineteenth-century on
2	201	Ceramic	vessel	1	One body fragment red and white underglaze transfer-printed white earthenware.	Nineteenth-century on
2	201	Ceramic	vessel	2	Two body fragments brown and white underglaze transfer- printed white earthenware	Nineteenth-century on
2	201	Ceramic	vessel	3	Three body fragments blue and white underglaze transfer- printed white earthenware.	Nineteenth-century on
2	201	Ceramic	vessel	1	One body fragment redware with white internal slip.	Nineteenth-century on
2	201	Ceramic	vessel	6	Body fragments refined white earthenwares.	Nineteenth-century on
2	201	Glass	vessel	4	Four body fragments machine blown colourless bottle.	Nineteenth-century on
2	201	Glass	vessel	2	Two body fragments machine blown green bottle.	Nineteenth-century on
2	201	Glass	vessel	3	Four body fragments machine blown colourless bottle.	Nineteenth-century on
2	201	Glass	vessel	1	One fragment opaque white glass.	Nineteenth-century on
2	201	Iron	nail	2	Two nails.	Nineteenth-century on
2	9999	Ceramic	vessel	1	Body fragment black- glazed redware	Nineteenth-century on
2	9999	Ceramic	vessel	1	Body fragment blue and white underglaze transfer-printed white earthenware.	Nineteenth-century on
2	9999	Ceramic	vessel	1	Body fragment refined white earthenware.	Nineteenth-century on
3	301	Ceramic	building material	1	Barley-sugar-edged edging tile.	Nineteenth-century on
3	301	Ceramic	vessel	1	Body fragment black- glazed redware.	Nineteenth-century on
3	301	Ceramic	building material	1	Brown-glazed wall tile.	Nineteenth-century on
3	301	Ceramic	vessel	2	Two body fragments blue and white underglaze transfer- printed white earthenware.	Nineteenth-century on
3	301	Ceramic	vessel	2	Two body fragments industrial slipwares.	Nineteenth-century on
3	301	Ceramic	vessel	8	Eight body fragments refined white earthenwares.	Nineteenth-century on
3	301	Ceramic	vessel	1	One body fragment redware with white internal slip.	Nineteenth-century on
3	301	Ceramic	vessel	1	One body fragment grey earthenware.	Nineteenth-century on
3	301	Ceramic	vessel	1	Body fragment blue ?stoneware.	Nineteenth-century on

3	301	Ceramic	vessel	2	Two body fragments plain white china.	Nineteenth-century on
3	301	Ceramic	vessel	3	Rim and body fragments late grey stoneware jars.	Nineteenth-century on
3	301	Glass	window	10	Mid-pane fragments colourless window.	Nineteenth-century on
3	301	Glass	window	1	Mid-pane fragment textured colourless window.	Nineteenth-century on
3	301	Glass	vessel	5	Five body fragments machine blown greenish bottle.	Nineteenth-century on
3	301	Glass	vessel	3	Three body fragments colourless leaded beaker.	Nineteenth-century on
3	301	Glass	vessel	2	Two body fragments machine blown dark green bottle.	Nineteenth-century on
3	301	Ind debris		1	Small fragment	Nineteenth-century on
4	401	Bone	animal	1	Fragment.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment black-glazed redware.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment self- glazed redware with white slip.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment blue-glazed refined white earthenware.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment cast white earthenware.	Nineteenth-century on
4	401	Ceramic	vessel	2	Two body fragments industrial slipware.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment black and white underglaze transfer- printed white earthenware.	Nineteenth-century on
4	401	Ceramic	building material	1	Marbled, brownish-glazed wall tile	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment blue and white underglaze transfer-printed white earthenware.	Nineteenth-century on
4	401	Ceramic	vessel	1	One body fragment green and white underglaze transfer- printed white earthenware, seaweed pattern.	Nineteenth-century on
4	401	Glass	window	6	Six mid-pane fragments colourless window.	Nineteenth-century on
4	401	Glass	vessel	1	One body fragment machine blown colourless bottle.	Nineteenth-century on
4	401	Glass	vessel	1	One body fragment machine blown greenish bottle.	Nineteenth-century on
4	402	Ceramic	vessel	1	Refined white earthenware handle.	Nineteenth-century on
4	402	Ceramic	vessel	1	Rim fragment blue and white underglaze transfer-printed white earthenware.	Nineteenth-century on
4	402	Glass	window	5	Colourless mid-pane fragments, one reinforced.	C20 on
4	9999	Ceramic	vessel	4	Rim and base fragments refined white earthenware	
4	9999	Ceramic	building material	1	Thin green-glazed tile.	Nineteenth-century on
4	9999	Glass	vessel bottle.	1	Embossed colourless	Late nineteenth-century

						on
5	501	Ceramic	vessel	1	One body fragment black-glazed redware.	Nineteenth-century on
5	501	Glass	window	2	Two mid-pane fragments colourless	Nineteenth-century on
5	501	Glass	window	1	Mid-pane fragment colourless etched sheet.	Nineteenth-century on
5	501	Glass	vessel	1	One body fragment machine blown greenish bottle.	Nineteenth-century on
5	505	Ind debris	1		Vitrified limestone with slag adhering.	Nineteenth-century on
7	701	Ceramic	vessel	2	Body fragments redware with white	Nineteenth-century on
7	701	Ceramic	vessel	1	One body fragment mauve and white underglaze transfer- printed white earthenware.	Nineteenth-century on
7	701	Ceramic	vessel	1	One body fragment green and white underglaze transfer- printed white earthenware.	Nineteenth-century on
7	701	Ceramic	vessel	2	Two body fragments blue and white underglaze transfer- printed white earthenware.	Nineteenth-century on
7	701	Ceramic	vessel	1	Body fragment plain white china.	Nineteenth-century on
7	701	Ceramic	vessel	3	Body fragments refined white earthenware, one with painted blue edge.	Nineteenth-century on
7	701	Glass	vessel	5	Mid-pane fragments colourless window.	Twentieth century on
7	701	Glass	vessel	2	Body fragments colourless machine-blown bottle.	Late nineteenth-century on
7	701	Glass	vessel	1	Base fragment moulded opaque white glass.	Late nineteenth-century on
8	802	Ind debris		2	Glassy slag.	Nineteenth-century on
8	803	Ceramic	building material	1	Brown salt-glazed sanitary pipe	Nineteenth-century on
8	803	Ceramic	vessel	2	Two body fragments blue and white underglaze transfer- printed white earthenware.	Nineteenth-century on
8	803	Ceramic	vessel	1	One body fragment late grey stoneware jar.	Nineteenth-century on
8	803	Ceramic	vessel	1	One body fragment cast refined white earthenware.	Nineteenth-century on
8	803	Glass	vessel	1	One body fragment machine blown colourless bottle.	Nineteenth-century on
8	803	Glass	window	1	One mid-pane fragment colourless window.	Nineteenth-century on

ILLUSTRATIONS

FIGURES

PLATES

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