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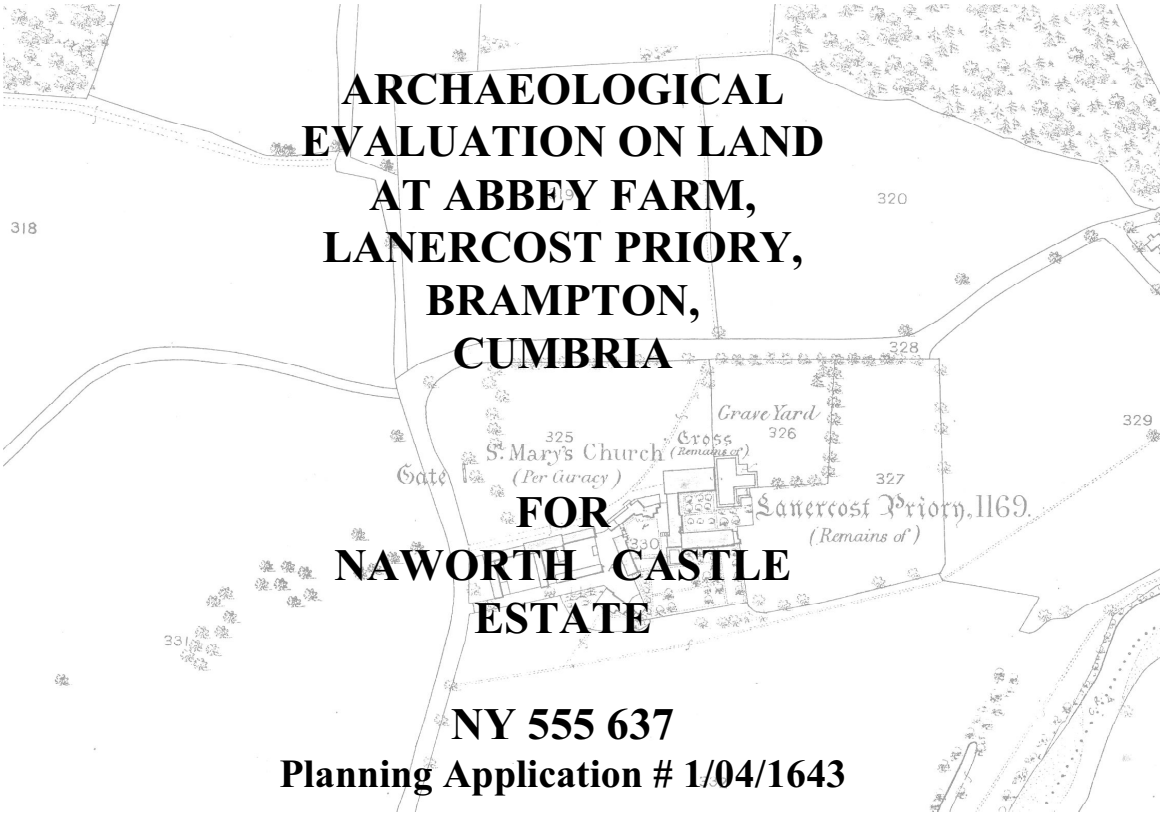

ARCHAEOLOGICAL EVALUATION ON LAND AT ABBEY FARM, LANERCOST PRIORY, BRAMPTON, CUMBRIA

FOR NAWORTH CASTLE ESTATE

NY 555 637

Planning Application # 1/04/1643

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EXECUTIVE SUMMARY

In February 2006, North Pennines Archaeology Ltd undertook an archaeological evaluation at Abbey Farm, Lanercost Priory, Cumbria (NY 555 637). The work was requested in response to a series of planning applications regarding the construction of a car park and installation of a septic tank, a scheme considered to affect an area of high archaeological potential. The work conformed to the standards set out in a brief provided by Cumbria County Council Historic Environment Service.

The evaluation identified several archaeological features within the area of the proposed development. The artefactual evidence indicates that the majority of the activity is broadly contemporary, and medieval in date. A later phase of post-medieval activity during the 19th century probably relates to the present building complex of Abbey farm.

The precise nature of the archaeological features is difficult to ascertain given the narrow window within which they have been observed. Nevertheless, these cut features do suggest that the remains of at least two medieval structures of unknown function are located within the vicinity of Trench 2.

The presence of building rubble within the Trench 2 is also worthy of note. This rubble is unlikely to be related to the clay foundations observed in Trench 2, and indicates that a further, probable post-medieval or medieval building, was demolished nearby

The most intriguing feature observed during the evaluation was that identified in Trench 3 as cut [316]. It appears that this is a substantial feature, originally cut in the medieval period (as evidenced by the recovery of 13th-14th century pottery from the primary fill) was subsequently backfilled in several stages during the post-medieval period (18th to 19th centuries). The most likely explanation considering the available evidence is that this was either a fish pond or a large east-west aligned ditch. It is possible that cut [316] represents the main boundary/defensive ditch (or *vallum*) for the earliest phases of Lanercost Priory. The *vallum* would have enclosed the entire Priory area, creating a defensive boundary during a turbulent time in which the Priory was suffering numerous attacks by the Scots.

Note: At this stage there has not been an opportunity to carry out the analysis of the environmental remains from the evaluation. It is intended to eventually add these analyses to this report as an *addendum*.

ACKNOWLEDGEMENTS

Thanks are due to Naworth Castle Estate for commissioning and supporting the work and to Jeremy Parsons, Assistant Archaeologist for Cumbria County Council Historic Environment Service (CCCHES), for his advice and assistance during the course of the project.

The fieldwork was carried out by Mark Dodd, Martin Sowerby, Nicola Gaskell and Jennifer Kinsman. The report and illustrations were produced by Mark Dodd and edited by Gareth Davies. The project was managed by Frank Giecco, Technical Director for North Pennines Archaeology Ltd.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Cumbria County Council Historic Environment Service (CCCHES) were consulted prior to a planning application submission regarding the construction of a car park and installation of a septic tank. The site is located on land at Abbey Farm, Lanercost Priory, Brampton, Cumbria (NGR NY 555 637) (Fig 1). The site is within an area of high archaeological potential adjacent to the 12th Century Priory (Scheduled Monument no. 23689). Consequently, CCCHES advised that a programme of archaeological works would be necessary prior to any proposed development application. North Pennines Archaeology Ltd (NPAL) were commissioned by Naworth Castle Estates to undertake the required archaeological evaluation within the development area itself.

1.1.2 The field evaluation comprised the excavation of a series of linear trial trenches in order to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The principal objective of this evaluation was to establish the presence/absence, nature, extent and state of preservation of any archaeological remains and to record these where they were observed.

1.1.3 This report sets out the results of the work in the form of a short document outlining the findings, followed by a statement of the archaeological potential of the area.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was prepared in response to a brief prepared by Cumbria County Council Historic Environment Service (CCCHES) for an archaeological field evaluation. This included a detailed specification of works to be carried out, which consisted of a visual site inspection, the excavation of a series of trial trenches and a programme of post excavation and reporting.

2.2 SITE INVESTIGATION

2.2.1 A site visit was made on the 16th February 2006. This was in order to note any surface features of potential archaeological interest and to identify any potential hazards to health and safety, such as the presence of live services or constraints to undertaking archaeological fieldwork, such as Tree Preservation orders and public footpaths.

2.3 ARCHAEOLOGICAL EVALUATION

2.3.1 The archaeological evaluation consisted of the excavation of three linear trial trenches measuring 12m x 1.2m, 25m x 1.2m, and 15m x 1.2m, which provided a 1% sample of an area of approx 6050m^2 (Figure 2). This was in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. In summary, the main objectives of the excavation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these were they are observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially that useful for dating purposes;
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.

2.3.2 Each trench was mechanically excavated, under archaeological supervision, by a 7.5 tonne tracked 360 degree excavator equipped with a toothless ditching bucket to the natural substrate. Each trench was then manually cleaned where possible, and any putative archaeological features were investigated.

2.3.3 Photography was undertaken using Canon EOS 100 and EOS 300V Single Lens Reflex (SLR) cameras. A photographic record was made using digital photography, 200 ISO Colour Print and Colour Slide film.

2.3.4 All work was undertaken in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluations (IFA 1994).

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current UKIC (1990) and English Heritage guidelines (1991). The archive will be deposited within an appropriate repository and a copy of the report given to the County Sites and Monuments Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 06 LAN-C.

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

3.1.1 Lanercost Priory and Abbey Farm are located in the valley of the River Irthing, 3.5 km northeast of Brampton. They are situated at the eastern edge of the Carlisle-Solway Plain on relatively low-lying ground which extends southwards as the Vale of Eden. Moors and fell rise to the north, while to the south, the River Irthing provides a corridor connecting to the Tyne Gap.

3.1.2 The solid geology on the eastern side of the area comprises Carboniferous rocks, in the form of a succession of mudstones, siltstones, sandstones and limestones. Some of these are resistant to weathering and have been left as cliffs and ridges alongside the river (Giecco, Jones and Jones 2003). To the south of the area a succession of Permo-Triassic sandstones, including the St. Bees sandstone, outcrops in places. This fine-grained, dull red sandstone has long been used as a building stone of high quality. Subsequent glacial erosion has resulted in the deposition of boulder clay and sand and gravel over much of this solid geology. Lanercost Priory stands on an extensive river terrace on the north bank of the River Irthing.

3.2 HISTORICAL BACKGROUND

3.2.1 Roman remains were found in and around Lanercost throughout the 19th century and *ex situ* Roman inscriptions were found built into various parts of the monastic buildings. The discoveries led to a display in 1836 of artefacts, such as altars and vases, in the undercroft of the priory (ibid, 70).

3.2.2 Works in 1889 to extend the Abbey Farm dairy, situated immediately to the west of the present site, unearthed the skeletons of three humans and two horses. Two of the human burials were noted to lie in an east-west position and the largest of the three skeletons was housed in a partially mortared stone cist (Bulkeley 1891, 70). The cist had a separate chamber for the burial's head, and was capped with stone flags. Examples of such burials are known from the Roman period, but they also re-emerge in the 10th century.

3.2.3 The skeleton of a horse was found at the foot of the cist burial, and the skeleton of a larger horse was discovered outside the dairy (ibid, 70). Occasionally burials of this type can be attributed to the early medieval (or 'Viking') period, but it also is possible that the horse burials are of a much later date, and may have been associated with the use of the Abbey farm.

3.2.4 There is some uncertainty as to whether the third burial was positioned on a north-south or east-west alignment (ibid, 70). If the burial was aligned north to south then it is likely to pre-date the east-west burials, perhaps suggesting a ritual significance of the site at Lanercost prior to the foundation of the monastery in 1169.

3.2.5 The date of the group of burials outlined above is speculative; Bulkeley suggested that they pre-dated the priory as they were located at some distance from the present churchyard, and proposes a Roman, Saxon or Anglo-Scandinavian date (ibid. 71). Further burials were apparently discovered close by during drainage works.

3.2.6 Excavations conducted by W S Calverley in 1896 or 1897 on the green to the north-west of the priory revealed the remains of a mound and ditch, together with some masonry of probable medieval date, and a small stone cist containing fragments of an urn and bones (Haverfield 1897, 195). The urn appeared to be Romano-British, and at least three of the bone fragments were identified by the Oxford Museum as deer bone; no human bone was identified.

3.2.7 An extensive geophysical survey comprising four survey areas was carried out at Lanercost Priory by English Heritage's Ancient Monuments Laboratory in 1992. Both resistivity and magnetometry techniques were used to reveal a number of anomalies, including possible ditches, robbed out walls, a possible kiln and a circular feature measuring 5m in diameter.

3.2.8 English Heritage undertook an evaluation at Lanercost Priory in 1994 in advance of a proposed scheme of ground works to install a new drainage system. Two L-shaped trenches were excavated abutting to the northwest corner of the priory and four juvenile inhumations, presumably of Medieval in date were located (Whitworth, 1998).

3.2.9 In 2003 North Pennines Archaeology Ltd undertook an archaeological desk-based assessment and field survey at Lanercost Priory. This assessment identified a number of significant archaeological features within the landscape of the priory and Abbey Farm. These included cropmark features indicative of enclosures, ridge and furrow cultivation, and earthworks, believed to be contemporary with the Priory itself. A low earthwork observed to the south of Abbey Farm was identified as an archaeological feature of potential significance (Giecco, Jones and Jones 2003).

3.2.10 The NPA report of 2003 also identified the Abbey Farm complex of farm buildings as a complete set of model farm buildings dating to the mid-19th century. Although this complex of buildings are not of national importance, they are certainly highly significant within a regional context (Giecco, Jones and Jones 2003).

4. EVALUATION RESULTS

4.1 Trench 1

4.1.1 Trench 1 was located 3m to the west of the eastern extent of the proposed development area (see Figs. 2 and 4). Trench 1 was 12m long by 1.2m wide, was orientated northeast-southwest, and ran parallel to the northeast to southwest aligned road from Brampton.

Plate 1: Trench 1 Post-excavation. Looking northeast.

4.1.2 The trench was excavated by machine to a maximum depth of 0.55m, which exposed the natural substrate (104).The natural substrate (104) consisted of a loose mid to light brown-yellow sandy gravel, containing sub-rounded stones averaging 0.1m in diameter.

4.1.3 A single archaeological feature, stone deposit (103) was located 1.8m northeast of the southwest extent of Trench 1 (see Plate 1 above). Stone deposit (103) consisted of a concentration of sub-rounded and rounded stones (between 0.05m and 0.2m in diameter), apparently running in an east-west aligned band (c.2 m wide) beyond the eastern and western extents of Trench 1 (see Plate 1 above). Three larger sub-angular stones, approximately 0.3m in diameter, were also observed, apparently forming the northern extent of stone deposit (103). Stone deposit (103) apparently directly overlaid the natural sand and gravel (104) and there was no evidence that the deposit was sitting in a man-made cut.

4.1.4 Stone deposit (103) is best interpreted as the remains of a possible trackway. There was no evidence of any bonding material within the deposit, and it lacked any distinct form that might be indicative of a structural feature such as a wall. Immediately overlying the stones was a further deposit, (102), a moderately compact, orange grey-brown, slightly silty clay, 0.4m in depth. Layer (104) probably represents a gradual silting of material in above the stone surface (103) (see Plate 2). The artefacts recovered from this deposit (104) suggest that it is of a medieval date (see section 5 below).

Plate 2: Stone deposit (103) with overlying deposit (104) partially removed

4.1.5 Overlying the possible pathway (103) and silting layer (104) was subsoil layer (101). Subsoil (101) was a moderately compact, orange grey-brown, slightly silty clay, 0.2m

in depth and containing occasional sub-rounded stones, 0.05m in diameter. Subsoil layer (101) was overlain by 0.2m of a friable, mid grey-brown, clay silt topsoil (100). Topsoil (100) contained occasional inclusions of sub-rounded stones 0.05m in diameter.

4.2 Trench 2

4.2.1 Trench 2 was 25m long by 1.2m wide, and was orientated approximately east-west (see Figs 2 and 3). Trench 2 was positioned across a raised earthwork identified by the Desk-Based Assessment carried out by North Pennines Archaeology Ltd in 2003 (Giecco, Jones and Jones 2003).

Plate 3: Trench 2 post-excavation. Looking east.

4.2.2 The trench was excavated by machine to a maximum depth of 0.85m, which exposed the natural substrate (220). The natural substrate, as identified in Trench 1, consisted of loose mid to light, brown-yellow sandy gravel with sub-rounded stones averaging 0.1m in diameter (see Plate 3).

4.2.3 Overlying the natural sand and gravel throughout Trench 2 was a loose, yellow-brown, clay-sand deposit (203), up to 0.3m in depth, containing occasional charcoal flecks and rounded stones 0.03m in diameter. Apart from the charcoal flecks, no further evidence for human activity was identified associated with deposit (203), and it is best interpreted as a naturally accumulated alluvial deposit potentially of a post-glacial date.

4.2.4 Five archaeological features were observed within Trench 2. Four of the features (cuts [209], [215], [212], [217]/[219]) apparently directly truncated alluvial deposit (203), whilst one feature, cut [206], appeared to be cut through the overlying subsoil, (201). The archaeological features identified within Trench 2 are now described below from west to east.

4.2.5 Cut [219] was located c.3m to the east of western extent of the Trench 2. Cut [219] was 1.8 m wide (east to west) in plan. The full length of the feature was not observed as it extended beyond the northern and southern extent of Trench 2. Cut [219] was apparently aligned north to south, and it contained a single fill of very compact brown-red clay with moderately frequent charcoal inclusions (218). Clay fill (218) appeared to represent a deliberately laid-down deposit, possibly acting as a waterproof lining/foundation deposit. The clay component of fill (218) must have been brought to the site from afar, as similar material does not occur naturally within the vicinity of the site. Once fill (218) had been removed, cut [219] was shown to have a moderately steeply sided profile, a concave base, and a depth of 0.8m. Cut [219] is best interpreted as the north-south aligned cut for the foundation of a possible timber building.

4.2.6 Truncating fill (218) was a second cut, [217]. Cut [217] was a linear feature, 1.15m wide (east to west) in plan, and running on a north-south orientation that mirrored cut [219], and suggested an association between the two features. The fill of cut [217] feature was a loose, mid-dark brown, clay-sand with inclusions of charcoal and building rubble (216), (including fragments of stone roof tile and roughly shaped masonry). Fill (216) may have formed through a combination of natural silting, and collapse/dumping associated with the disuse of a building. Upon removal of fill (216), cut [217] was shown to have almost vertical sides, with a sharp break of slope leading to a flattish base, and a total depth of 0.65m. Cut [217] is best interpreted as a construction trench for a possible timber sill beam, fill (216) may represent the *in situ* decay of this timber.

4.2.7 To the east of cut [217]/[219] was a large pit or ditch feature [212] (see Plate 5). Cut [212] was 2.1m wide (east to west) and extended in plan beyond the northern and southern limits of Trench 2. The precise form of this feature is unknown as its eastern side was truncated away by a later ditch/pit feature, cut [215] (see below). Within cut [212], two fills were observed; a primary silt, (211) consisting of a friable, light grey silt with fine gravel inclusions (0.16m in depth) was overlain by a secondary fill (210) consisting of a possible deliberately backfilled deposit (0.75m deep), of moderately compacted, mid brown, sandy clay with occasional inclusions of sub-rounded stones (0.04m in diameter). Upon excavation, the surviving portion of cut [212] was found to be 0.76m in depth with moderately steep sides and a flattish base. The northwest extent

of cut [212] appeared to curve slightly to the northeast, implying that the feature was beginning to terminate at its northern extent, and it is thus more suggestive of a pit than a linear ditch. Finds recovered from the secondary fill of this feature (210) suggest a medieval date (13th and 14th centuries, see section 5 below).

Plate 4: North-south aligned possible foundation cut [217] /[219], post-excavation. Looking south.

4.2.8 The secondary fill of pit/ditch feature [215], was truncated at its eastern extent by cut [212] (see Plate 5). Cut [212] was a large pit or ditch feature 2.2m in width, extending in plan beyond the northern and southern limits of Trench 2. Within cut [215], two fills were observed; the primary fill (214), (0.4m deep) was a relatively mixed mid brown, clay sand /clay silt with moderate to frequent inclusions of sub-rounded stones (up to 0.06m in diameter) Fill (214) was overlain by a deliberate dump of pink-brown, clay sand (213), (0.35m deep) containing occasional inclusions of sub-angular stones (0.04m in diameter). Fill (213) is best interpreted as either a sealing deposit or consolidation deposit. Upon removal of fills (213) and (214), cut [215] was shown to be 0.7m in depth with moderately steep sides and a flattish base. As with cut [212], cut [215] appeared to be beginning to terminate towards the northern side of Trench 2, making it more likely that this is a pit feature. Fills (213) and (214) produced no dating evidence.

Plate 5: Ditch/Pit features [215] and [212]. Looking southwest.

4.2.9 A metre east of the eastern extent of pit/ditch cut [215] was a fifth feature, cut [208] (see Plate 6). Cut [208] was 1m wide, north-south aligned, and ran beyond the northern and southern limits of Trench 2. Cut [208] contained a single fill (207) of a friable, mid grey, clay sand with occasional inclusions of sub-rounded stones. Fill (207) appeared to represent a naturally silted deposit, and it did not yield any dateable artefacts. Upon removal of fill (207), cut [208] was shown to be 0.48m in depth with moderately steep sides and a concave base. Cut [208] is best interpreted as a small ditch, although the interpretation of cuts [217]/[219] as a possible structural feature means that a structural function for cut [208] cannot be entirely eliminated.

Plate 6: Ditch [208] and overlying clay deposit (209). Looking south.

4.2.10 Overlying, and apparently sealing, ditch fill (207), was a deposit of clay, (209) (see Plate 6). This compact red-brown clay was 1.5m wide, 0.13m in depth and extending slightly beyond the eastern extent of ditch fill (207). It is unclear whether clay deposit (209) was deliberately placed above ditch fill (207); it is possible that their apparent association is entirely coincidental, and that they actually represent two distinct phases of activity. However, it is worth noting that clay deposit (209) is very similar to clay fill (218), identified in ditch [219] towards the west of Trench 2.

4.2.11 At the western extent of the Trench 2, a spread of demolition rubble, (221) was observed partially overlying fill (216) (cut [217]) and extending up to 3.2m east of the western extent of Trench 2. Demolition layer (221) was a maximum of 0.25m in depth, and consisted of a loose dark brown sandy silt, mixed with lime mortar fragments, roof tiles and a piece of medieval architectural stone (Plate 7). It is possible that demolition layer (221) is the source of the *ex situ* building material identified within fill (216). The presence of a possibly medieval demolition layer suggests the existence of nearby medieval structures, possibly associated with the medieval priory.

Plate 7: Architectural fragment from deposit (221)

4.2.12 Overlying demolition layer (221) was a layer subsoil, (201) 0.26m in depth. Subsoil deposit (201) consisted of moderately compacted light-mid brown, clay silt with occasional sub-rounded stones less than 0.03m in diameter.

4.2.13 Subsoil (201) was truncated by cut [206], located approximately 2m west of the eastern extent of Trench 2. The clarity of this feature was poor, but it was defined as a semi-circle of large roughly shaped red sandstone blocks (205), (up to 0.2m in diameter) c.1m in width. The feature extended beyond northern limit of Trench 2. The observed sandstone blocks were overlying fill (204), a loose collapse deposit of a mid grey-brown sandy clay (0.27m deep and 1m wide). Cut [206] is best interpreted as an isolated post-medieval pit specifically excavated for the deposition sandstone blocks (205).

4.2.14 Overlying fill (205) was the topsoil, (200). The topsoil covered the entire excavated extent of Trench 2, had a maximum depth of 0.4m and consisted of a moderately compacted mid-brown, slightly clay silty-sand with moderately frequent inclusions of sub-rounded and rounded stones (less than 0.03m in diameter). Several residual, medieval finds (including small find No.1, Figure 5) were recovered from topsoil (200).

Plate 8: Pit [206] with red sandstone blocks (205). Looking north.

4.3 Trench 3

4.3.1 Trench 3 was 15m long by 1.2m wide, and was orientated approximately north-south. Trench 3 was positioned over the location of a proposed septic tank, approximately 15m to the west of the Abbey Farm cottages (see Fig 2).

4.3.2 The trench was machine excavated to a maximum depth of 1.2m, which exposed the natural substrate (301) at the southern end of the trench. The natural geology (301) consisted of a loose mid to light brown-yellow sandy gravel with sub-rounded stones averaging 0.1m in diameter (see Plate 9).

Plate 9: Trench 3 post-excavation. Looking north.

4.3.3 Natural sand and gravel was not observed along the entire length of Trench 3 due to the presence of a substantial cut feature, at least 18m wide (north-south) [316]. The

full extent of this cut was not clear, as only its southern edge was exposed in plan, and the feature extended beyond the eastern and western extents of the trench.

4.3.4 A hand excavated slot was dug in to cut [316], 1.6m south of the northern extent of Trench 3. A number of fills were observed. The primary fill (302), was a loose mid to light grey-brown, slightly clay, sand and gravel up to 0.08m in depth, with frequent sub-rounded stones of varying sizes up to 0.15m in diameter. Fill (302) represents re-deposited natural gravels that presumably accumulated shortly after the cutting of the feature. The primary fill (302) was overlain by fill (303), a firm mid yellow-grey, mixed sand and silty clay 0.2m in depth, containing inclusions of charcoal flecks and occasional sub-rounded stones (<0.06m in diameter). Overlying fill (303) was fill (304), a firm mid grey, silty sandy clay containing occasional sub-rounded stones (<0.05m in diameter) and charcoal flecks, deposit (304) totalled a depth of 0.25m. Fills (303) and (304) appear to be alluvial in origin, and indicate that water may have been present within cut [316] at this time. These fills are undated but are of a presumed medieval date.

4.3.5 Overlying fill (304) was fill (305) (0.4m in depth) a firm, dark brown-black, silty clay. with occasional inclusions of sub-rounded stones (up to 0.1m in diameter), and frequent charcoal fragments (representing approximately 10% of the deposit). Fill (305) produced medieval and post-medieval pottery. Fill (305) was overlain by fill (306), a narrow band (0.1m in depth) of firmly compacted mid to light, pink-red clay containing sub-rounded stones and occasional fragments of both mortar and charcoal. Fill (306) was overlain by (307) (0.3m in depth) a firm to soft, mid brown-grey clay silt containing fragments of red sandstone, occasional sub-angular stones (0.08m in diameter) and frequent charcoal fragments. Fills (305), (306) and (307) were observed solely within the hand-excavated slot, and are best interpreted as dumped deposits of a post-medieval date.

4.3.6 Towards the southern extent of Trench 3, the earliest deposit observed within cut [316] was (314), loose, mid to light, grey-yellow slightly silty sand, 0.35m in depth. Fill (314) deposit contained moderate-frequent inclusions of charcoal and frequent sub-rounded stones towards the base of the deposit. This deposit could not be stratigraphically linked to other fills within cut [316], but it may be roughly contemporaneous with fills (303) and (304). Fill (314) produced medieval pottery (13^{th}-14^{th} century) suggesting a medieval date for this infilling phase.

4.3.7 Fill (314) appears to have been truncated at a later date by a tree-bole, creating a mid grey, sandy silt deposit (313). Tree bole (313) may also post date fills (305), (306) and (307) that were observed in the hand excavated slot, but this must remain conjectural as no direct stratigraphic link has been made.

4.3.8 Overlying treebole (313), and extending over much of the southern half of Trench 3, was fill (310), a moderately compacted, mid to dark grey brown, sandy clay silt, 0.3m deep, containing occasional sub-rounded stones (less than 0.06m in diameter). Fill (310) was overlain by (309), a shallow deposit (0.1m deep) comprising a firm, mid brown, clay silt containing occasional sub-rounded stones (less than 0.04m in diameter) and occasional charcoal fragments. Fill (309) (and fill (307) in the excavated slot) was overlain by fill (308) a firm, mid to dark grey, clay silt, 0.6m in depth, containing occasional sub-rounded stones (less than 0.07m in diameter) and moderately frequent inclusions of charcoal throughout. Fills (310), (309) and (308) are best interpreted as naturally accumulated tertiary deposits of a post-medieval date.

4.3.9 Once the fills in the hand excavated slot had been removed, cut [316] was observed to have a depth of at least 2.05m. The sides of cut [316] appeared to slope gently from north to south into a flattish, slightly concave, base. Although the full extent of cut [316] was not uncovered, the observed tip lines within the fills indicate the centre of cut [316] to be approximately 9m north of the southern extent of Trench 2, a projected a total width of approximately 18m (north to south). However, caution must be exercised over these stated dimensions as it is possible that Trench 3 was located at an oblique angle across cut [316], giving a potentially false indication of the profile and dimensions. Multiple sherds of pottery were recovered from the fills of cut [316] Trench 3 representing the 13th-14th centuries as well as the 19th century. The majority of the medieval artefacts were isolated within fill (314) (see section 5 below). The interpretation of cut [316] is uncertain, but it may represent a large east-west aligned ditch feature, or even a fishpond, in-filled during the medieval and post-medieval periods.

Plate 10: Feature [316] and its fills. Looking west.

4.3.10 Overlying tertiary fill (308) (cut [316]) was a layer, (311). Layer (311) a moderately compacted, mid to dark brown-grey clay silt (0.15m deep), containing occasional sub-rounded stones (less than 0.03m in diameter) covered most of the extent of Trench 3. Layer (311) also contained occasional charcoal fragments, and is best interpreted as a buried soil horizon representing an old ground surface. Layer (311) was overlain by deposit (312), a dumped deposit of friable dark grey brown, mixed sandy silt containing building debris, including small red sandstone fragments and significant quantities of mortar and charcoal. Dumped deposit (312) was overlain by the topsoil, (300), a friable dark grey-brown sandy silt (0.3m deep) containing occasional sub-rounded stones (less than 0.08m in diameter). Overlying topsoil (300) was a layer of re-deposited natural sand and gravel, (315), which appears to be a relatively recent dump of material situated within a depression in the topsoil.

5. THE FINDS

5.1 The pottery and other artefactual material was cleaned and packaged according to standard guidelines, and recorded under the supervision of F Giecco (NPA Ltd Technical Director). The metalwork has been placed in a stable environment and will be monitored for corrosion. At this stage only initial quantification and identification has been undertaken. The bulk finds are quantified in Table 1, and the small finds are quantified in Table 2.

Context	Material	Quantity	Weight (kg)	Spot Date/Period
Tr1 (102)	Pottery	2	0.120	Med, 14th-15thcentury
Tr2 (200)	Pottery	7	0.049	Med, 13th -14th century
Tr2 (210)	Pottery	3	0.067	Med, 13th-14th century
Tr2 u/s	Ferrous and Lead	61	1.059	
Tr2 u/s	Pottery	1	0.019	Med, 14th-15th century
Tr3 (305)	Pottery	2	0.012	Med, 13th-14th century and Post-Med
Tr3 (312)	Pottery	5	0.141	Post-Med and 19th century?
Tr3 (314)	Pottery	3	0.136	Med, 13th-14th century
Tr3 (308)	Lead	4	0.046	
Tr3 (310)	Ferrous and Lead	8	0.006	
Tr3 u/s	Ferrous and Lead	23	2.477	
Tr3 u/s	Clay pipe	1	0.004	Post-Med
Tr3 u/s	Plastic	1	0.004	Modern
Tr3 u/s	Bone	1	0.002	

Table 1: Quantification of Bulk Finds recovered from LAN-C.

5.2 THE POTTERY

5.2.1 Medieval

5.2.2 Two sherds of green glazed, reduced grey-ware were recovered from deposit (102) in Trench 1, and indicates a date from between the 14th –15th centuries.

5.2.3 Within the topsoil of Trench 2, a single sherd of red gritty ware from the 13th century and 6 sherds of partially reduced grey-ware dating to the 13th and 14th centuries were retrieved.

5.2.4 From deposit (210) a single sherd of red gritty ware and two sherds of green glazed, partially reduced grey ware suggest a date between the 13th and 14th centuries.

5.2.5 A single sherd of unstratified reduced grey-ware from the 14th-15th centuries was also found within Trench 2.

5.2.6 Deposit (305) yielded a single sherd of 13th-14th century, green glaze, partially reduced grey-ware.

5.2.7 Three sherds of 13th-14th century, partially reduced grey-ware were also recovered from deposit (314). Two of these were body sherds and the third was a fragment of a handle.

5.2.8 **Post-Medieval**

5.2.9 A single sherd of unidentified post-medieval pottery was recovered from deposit (305).

5.2.10 Deposit (312) in Trench 3 produced 5 sherds of post-medieval pottery of various types, largely dating to the 19th century.

5.3 METAL ARTEFACTS

5.3.1 A combination of both ferrous and lead based artefacts were recovered from the spoil heaps using a metal detector following excavation by the mechanical excavator. The vast majority of the ferrous objects are unidentified, but are probably from agricultural machinery. Meanwhile, the lead recovered represents a combination of window lead and possible lead working waste of putative medieval date.

5.3.2 It has not yet been possible to fully assess or date these artefacts.

5.4 THE SMALL FINDS

Context	SF No.	Object/Material	Quantity	Weight (kg)	Period
Tr2 (200)	1	Buckle/Cu alloy	1	0.009	14th –15th century
Tr3 u/s	2	Penny/Cu alloy	1	0.027	c. 1797
Tr3 (308)	3	Buckle/Fe	1	0.007	13th –16th century
Tr3 u/s	4	Vessel/Pb alloy	1	0.152	19th century

Table 2: Initial Quantification of Small Finds recovered from LAN-C.

5.4.1 **Small Find No.1**- This is believed to be a one-piece lyre-shaped, Cu alloy buckle dating between 1390 and 1420AD. At the distal end the box-like plate for the attachment of the strap has been broken and is not present. A small amount of plating is still visible and would most likely be an amalgam of 70% tin and 30% silver (Marshall, 1996) (Figure 5).

5.4.2 **Small Find No.2-** A George III, Cu alloy penny dating to 1797 (Seaby 3777).

5.4.3 **Small Find No.3-** This Iron buckle is less diagnostic than SF No. 1, but dates from anywhere between the 13th and 16th centuries and would probably have formed part of a harness (Marshall, 1996) (Figure 5).

5.4.4 **Small Find No. 4-** The neck of a lead alloy vessel, almost certainly dating to the 19th century (Figure 5).

6. ENVIRONMENTAL AND BONE ANAYLSIS

6.1 Introduction – Environmental remains

6.1.1 In the 3 trenches excavated some 2 contexts were considered worth sampling. The first sample came from a ditch fill, the second from a deposit. Both whole earth samples were selected for processing in order to assess their environmental potential. This will help provide further information as to the depositional processes involved in their formation. The methodology employed required that the whole earth samples be broken down and split into their various different components. This was achieved by a combination of water washing and flotation. The recovered remains can then be assessed for content.

6.1.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than 1mm falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.

6.1.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy.

SAMPLE NUMBER	CONTEXT NUMBER	SAMPLE SIZE (litres)	FLOT SIZE(cm^3)	RETENT SIZE (cm^3)
1	207	40	10	2000
2	303	20	10	2000

Table 3: Details of samples and contexts

DETAILS			RETENT FRACTION							LIGHT FRACTION													
Context	Context type	Sample number	Root material	Charred wood	Coal	Burnt bone	Bone	Gravel	Stones	Insects	Charred wood	Root material	Charred wheat	Charred oats	Charred barley	Grass	Chenopodium	Raspberry	Sambucus nigra	Spergula arvensis	Other seeds	Charred organic	Woody plant parts
207	Fill	1	2	1	1	0	0	3	3	0	1	3	0	1	0	0	1	0	1	1	0	0	1
303	Dep	2	1	1	0	0	0	2	3	0	3	1	1	1	1	0	0	1	1	0	0	0	1

Table 4 : Contents of flot and retent residues from samples.

Key to tables: Fill = ditch, posthole or pit fill, Dep = deposit. Contents assessed by scale of richness 0 to 3. 0 = not present, 1 = present, 2 = common, 3 = abundant.

6.2 Sample 1 (Context 207)

6.2.1 This fairly compact pinky clay sample was from the fill of a ditch. It contained occasional small rounded and sub-rounded stones. The retent was made up of stones and gravel with an amount of root matter present. There was also a quantity of coal and a small amount of charcoal. The flot contained one charred oat, a seed of *Spergula arvensis* and several seeds of *Sambucus nigra*. There was also a quantity of root material.

6.3 Sample 2 (Context 303)

6.3.1 This sample was a deposit, alluvial in nature but mixed with natural and a primary fill. The retent of this sample was made up of gravel and stones with a small amount of root material and coal. The flot contained one very degraded wheat or barley grain (from the size) and a few oats. *Sambucus nigra* and raspberry were also present.

6.4 VERTEBRATE REMAINS

6.4.1 No vertebrate remains, either burnt or unburnt were recovered from the site.

6.5 MOLLUSC REMAINS

6.5.1 No mollusc remains were recovered from the site.

6.6 DISCUSSION

6.6.1 The homogeneous fill of ditch [208] was capped by a layer of red orange clay but no artefacts were recovered to enable a date to be established. It did not contain any seeds of importance. The partially natural fill (303) of ditch [316] contained charred grain as wheat or barley and small oats. The other seeds could have been wind blown. There was also an amount of charcoal suggesting that the grain was deposited after processing, probably drying as it was 'clean' with no charred weed seeds.

6.6.2 There is nothing to be gained from the further study of this material.

6.7 CONCLUSION AND RECOMMENDATIONS

6.7.1 Although charred grain was recovered from both deposits, without suitable dating evidence there is very little that can be said about these deposits. The potential for

further information being gained from the examination of this material is limited and so it is recommended that no further work be done.

7. DISCUSSION AND CONCLUSION

6.1 This evaluation has identified several archaeological features within the area of the proposed development. The artefactual evidence indicates that the majority of the activity is broadly contemporary, and medieval in date. A later phase of post-medieval activity during the 19th century probably relates to the present building complex of Abbey farm.

6.2 The precise nature of the archaeological features is difficult to ascertain given the narrow window within which they have been observed. The ditch-like features [208] and [219]/[217], within Trench 2 would appear to have separate functions given their contrasting morphologies. However, the presence of red clay (deposits (209) and (218), in association with both features, suggests that they have more in common than would first be imagined. The red clay does not occur naturally within the vicinity of this site and must represent a deliberate deposit for a specific purpose. The most likely explanation for the clay deposits would be to provide a water-proof foundation for a sill-beam, as noted on sites in Carlisle (McCarthy, 2000), this is particularly evident within cut [217]. It seems unlikely that the possible foundation cuts ([208] and [219]/[217]) observed in Trench 2 relate to the same structure, given their contrasting stratigraphic positions. Nevertheless, these cut features do suggest that the remains of at least two medieval timber structures of unknown function are located within the vicinity of Trench 2.

6.3 The presence of building rubble within the Trench 2 ((216) and (221)) is also worthy of note. It is not certain where this material originated, but it is unlikely to be related to the clay foundations observed in Trench 2. The presence of building rubble (216)/(221) indicates that a further, probable post-medieval or medieval building, was demolished nearby. In particular, the large stone architectural fragment that was retrieved (Plate 7), hints at the existence of a rather substantial structure. It is even possible that this architectural fragment may come from the Priory itself, perhaps being removed following one of the numerous attacks by the Scots during the medieval period (Giecco, Jones and Jones, 2003).

6.4 The two large, flat-bottomed features [212] and [215], located inbetween the two possible foundation cuts in Trench 2 have no clear function, although the fill of the earliest cut ([212]) did provide evidence suggesting a 13th-14th century date. The exact relationship between the flatbottomed pits and other features in Trench 2 is not clear, but stratigraphically they are broadly contemporary. The only exception to this is the pit observed at the eastern end of the trench containing the red sandstone blocks [206]. This feature, although undated must be relatively modern as it was observed cutting through the subsoil (201).

6.5 The Desk-Based Assessment carried out by North Pennines Archaeology Ltd in 2003 highlighted a cropmark and related earthwork that coincided with the location of Trench 2. The excavation of Trench 2 across the width of this feature has not been able to clarify what these features might represent; no specific feature identified in the evaluation can be related to what was visible on the surface.

6.6 The most intriguing feature observed during the evaluation is that identified in Trench 3 was cut [316]. It appears that this is a substantial feature, originally cut in the medieval period (as evidenced by the recovery of 13th-14th century pottery from the primary fill) that was subsequently backfilled in several stages during the post-medieval period (18th to 19th centuries). This post-medieval backfilling activity may be directly linked to the present Abbey farm buildings, almost certainly as part of a general landscaping programme.

6.7 The original purpose of cut [316] feature is open to debate, particularly given the fact its overall form is presently unknown. The most likely explanation considering the available evidence is that it was either a fish pond or a large east-west aligned ditch.

6.8 The interpretation of cut [316] as a fish pond is problematic. The primary fills of cut [316] certainly suggest the presence of water within the feature at some point. However, the location of the feature on the flood-plain close to the River Irthing mean that this water may well have accumulated naturally. Given the fact that the natural substrate is sand and gravel, it does not seem likely that cut [316] would successfully have held large amounts of water over a prolonged period. There was also nothing observed during the environmental analysis to support this possiblilty.

6.9 The most plausible interpretation of cut [316] is that it represents a large ditch, unfortunately, its exact size and form was not easily identifiable during this evaluation. The orientation of this possible ditch is equally uncertain due to the limited area uncovered, although it is possibly orientated east-west. It remains a possibility, however, that cut [316] represents the main boundary/defensive ditch (or *vallum*) for the earliest phases of Lanercost Priory. The *vallum* would have enclosed the entire priory area, creating a defensive boundary during a turbulent time in which the Priory was suffering numerous attacks by the Scots.

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