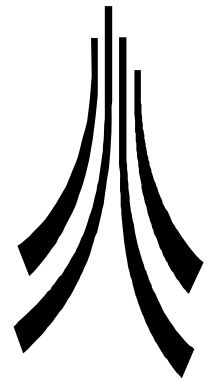


LANCASTER
UNIVERSITY
ARCHAEOLOGICAL
UNIT



June 1997

LOWTHER PARK
Cumbria

Archaeological Survey Report

Commissioned by:

Lowther Estates Ltd and
Lake District National Park Authority

LOWTHER PARK Cumbria

Detailed Archaeological Survey

Checked by Project Manager. Date
Passed for submission to client. Date

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EXECUTIVE SUMMARY

The Lancaster University Archaeological Unit (LUAU), at the request of Capsticks (Landscape Design Consultants) and Lowther Estates, undertook a detailed survey of three sites in Lowther Park, centred on NY 528234. These sites varied considerably in both period and character; the earliest was an enclosed settlement of Romano-British type (Site 57). The other sites were the Lowther medieval settlement (Sites 38 and 41), which was associated with the Castlesteads defensive ringwork (Site 39), and finally the boundaries of the former deer park were surveyed. The work was undertaken in accordance with a brief prepared by the Lake District National Park Authority (LDNPA) and followed on from an identification survey of the park, undertaken by LUAU. The detail survey fieldwork took place over a 5 day period between 2nd and 6th December 1996.

The Lowther medieval and Romano-British settlement sites were surveyed by total station survey and manually drawn in the field, the results being digitised into a Computer Aided Draughting (CAD) system. The deer park was surveyed by a combination of total station survey and Global Positioning System (GPS) survey and the data was digitally incorporated with manual edits within the CAD system. In conjunction with the surface survey a documentary study was undertaken to investigate the history and development of the early deer park. A gazetteer of all archaeological features was compiled.

The Romano-British settlement site (site 57) at Greatholme Plantation, in the centre of Lowther Park, is comparable in form to others in the region, notably at Yanwath Wood and on Askham Fell. It has at least four huts, and there are also associated rectilinear enclosures. In at least one of these enclosures was a lynchet, which would indicate arable as well as pastoral activity associated with the settlement.

The Lowther medieval settlement (Sites 38 and 41) is associated with a possible medieval ringwork castle (Castlesteads, site 39), and both are just north of Lowther Castle. The village comprised an east/west road extending out from the Castlesteads ringwork, with another road extending north from the centre of the village, towards St Michael's Church. A series of domestic structures were set against the east/west road with a limited number of building platforms and tofts adjacent to the north/south road. To the south of the village is an artificial terrace created from a natural ridge, upon which is a series of four rectangular enclosures, and at least two of these include small structures in the corners. The enclosures would appear to be further tofts and crofts.

The deer park, dating from 1283 or 1337 (Port 1981, 132; Owen 1996) was edged by substantial pale boundaries, and is cartographically documented from 1683. The documentary survey did not reveal any significant new cartographic records, however, it did enable a re-appraisal of the development of the park which indicates that the area of the former deer park has not been subject to significant change. The early deer park was 66 hectares in extent, but, at some time prior to 1683, the park was substantially expanded, and some of the deer park boundaries remained in use as part of the later park. The boundaries were in places marked by prominent banks, up to 3-4m wide with large quarry ditches on both sides. The bank would have been topped by a pale to restrict the deer. It is significant that the boundaries which were re-used as part of the later park are considerably more prominent and substantial than those unchanged since the time of the original deer park.

The survey has reinforced the results of the identification survey (LUAU 1997) and confirmed the remarkable survival of early relict landscapes, which reflects the emparkment of the land and thereby its preservation as a controlled wilderness. The earlier report recommended for the detailed survey of eight sites or landscapes and three of these have now been subject to detailed survey. However, the results of the present survey have highlighted the archaeological importance of three of the remaining sites (Sites 5, 9 and 95), and it is pertinent to reinforce the earlier recommendation that these should be subject to detailed survey.

1. INTRODUCTION

1.1 BACKGROUND

- 1.1.1 The Lancaster University Archaeological Unit (LUAU) undertook a desk-based and identification survey of Lowther Park (LUAU 1997) at the request of Capsticks (Landscape Design Consultants) and the Lowther Estates according to a brief (*Appendix 1*) produced by the Lake District National Park Authority (LDNPA) and a project design produced by LUAU (*Appendix 2*). The work was funded by Lowther Estates and LDNPA. The prime purpose of this survey was to enhance the existing archaeological information within Lowther Park, and to inform future management decisions with regard to conservation matters relating to the archaeological and historical content of the park's landscape. The identification survey report (1997) recommended a further programme of detailed archaeological survey of the more significant sites within the park and LUAU was commissioned to undertake a detailed survey of three of these: a Romano-British settlement at Greatholme Plantation, the Lowther Medieval Settlement and the former deer park at the southern end of the present park.
- 1.1.2 The surveys of the Romano British and the medieval settlements were undertaken in December 1996 and the survey of the deer park was undertaken in January 1997.

2. METHODOLOGY

2.1 DETAIL SURVEY METHODOLOGY

- 2.1.1 **Level 3 Survey:** In accordance with the recommendations of the identification survey report a level 3 survey (*Appendix 3*) was undertaken of the Greatholme Plantation settlement and the Lowther medieval settlement. This is a detailed level of purely interpretative survey; it involves very detailed interpretative hachure draughting of surface features and is intended for output at scales of up to 1:50.
- 2.1.2 The control for the survey was established by closed traverse using a total station and was able to maintain an internal control accuracy of better than +/- 0.05m. The primary control points were subsequently located by the use of a Global Positioning System (GPS) which uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey (OS) national grid. The accuracy of the method is +/- 1.0m but is sufficient to locate the survey onto the OS digital mapping, provided under licence by LDNPA, which is typically of a much lower order of accuracy (c +/- 4m).
- 2.1.3 The archaeological detail and significant topographic detail was surveyed using a Zeiss ELTA 3 total station and data-logger. The digital survey data was transferred, via DXF file format, into a CAD system. The archaeological detail was drawn up in the field with respect to field plots of the survey data and these edits were then transferred onto the raw survey data within the CAD system. The archaeological digital data was subsequently superimposed onto base digital topographic data supplied by LDNPA. Where a superimposition between LUAU survey topographic detail and the OS surveyed detail occurred, it was found that the OS error was never worse than +/- 3.5m and confirmed the accuracy of the survey methodology.
- 2.1.4 **Deer Park Level 2 Survey:** The deer park, by virtue of its extent, was subject to a lower level of survey than the other two sites. A level 2a survey was undertaken which provides a basic outline record of the archaeological features, within their local topographic context. This defines the most basic level of instrument survey and is appropriate for the recording of scattered, low complexity archaeological features, typically those found during an extensive open area survey. Archaeological features were defined in outline or with limited hachure annotation. Topography was for the most part extracted from the OS base. The record incorporates a basic level of textual description of individual features and an overall interpretative assessment of complete site groups.
- 2.1.5 The survey was undertaken by a combination of GPS survey and total station survey techniques. The boundaries at the eastern side of Decoy Hag were surveyed by total station with respect to a GPS located survey baseline. The remainder of the boundary was recorded by GPS survey. The results of both techniques were superimposed within a CAD system and were incorporated with detail from annotated sketches of the earthworks.
- 2.1.6 **Documentary Study of the Deer Park:** As part of the detailed survey of the deer-park further documentary research was undertaken. As might be expected for one of

the largest estates in Cumbria, owned by one of the countries most historically significant families, the available published and manuscript material for Lowther Castle and Park is very extensive. About half of the c450 items of maps, plans, and architectural drawings have been studied in part by previous workers. These include, however, large numbers of unexecuted designs, and only a small number of items were specifically relevant to the Park, as opposed to the Castle or wider estate. Mr D Bowcott at CRO (Carlisle) has spent around 12 years cataloguing the Lonsdale papers, and unfortunately the List of Plans is in the process of being superseded. A single box of 13 small rolled and folded plans was viewed, together with (briefly) eight of the (D Bowcott, pers comm) c24 large rolled plans.

- 2.1.7 The main primary sources for Lowther Park are a number of maps and plans which date from the late seventeenth century onwards. The other main document of relevance is by Sir John Lowther, 1st Baronet, entitled *memorable observations...of the House...at Lowther...*, (CROC D/Lons/L/A/1/1 270). Secondary sources also make reference to a few letters and other original documents in the Record Office in Carlisle which refer to the Park, however a detailed search of these and any other possible sources was outside the scope of this project.

3. HISTORIC BACKGROUND

3.1 TOPOGRAPHIC CONTEXT

3.1.1 Lowther Park is located on the eastern side of the Lowther valley which topographically defines the north-eastern edge of the lake District (Fig 1). Geographically it is located to the south of Penrith and immediately to the west of the M6 motorway. It is in an area of gentle sloping, undulating limestone terrain and the area is dominated by a series of north/south orientated limestone scarps.

3.2 THE HISTORY OF THE LANDSCAPE

3.2.1 The land within the extent of the present park has been occupied since the Bronze Age period and throughout most of the subsequent periods. The emparkment of the land has restricted modern intensive agricultural techniques which has enabled the preservation of earlier landscapes. The archaeological background to the park has been presented in detail within the identification survey report (LUAU 1997) and is summarised below:

3.2.2 **Prehistoric:** The earliest identified activity within the vicinity of the park is from the Bronze Age: there are a pair of round cairns just south of the park at Round Hill (NY 541219) and also a pair of standing stones and associated round cairn at Crooklands (NY 5314 2593), to the north of the park (Fairclough 1979). The earliest settlement remains are from the Iron Age and comprise the impressive Castlesteads hillfort, at the northern end of the park.

3.2.3 **Roman:** There is considerable evidence of Roman settlement in the area; to the north of Castlesteads hillfort, at Yanwath Wood (NY 51932598), is a Romano-British enclosed settlement and on the opposite side of the park is a similar Romano-British type settlement at Greatholme Plantation (Site 57). At Skirsgill Hill, only 3km to the west of Lowther are two further Romano-British settlements (Quartermaine and Leech forthcoming).

3.2.4 **Medieval:** There is evidence of early medieval activity associated with St Michael's church; three pre-conquest decorated hog-back tombstones are located within the churchyard to the north of the settlement and there used to be two cross-shafts inside Lowther Castle, which were probably of eighth century date. The earliest medieval fortified structure at Lowther was the Castlesteads ringwork structure, immediately to the west of the former medieval village; this was referred to in 1174 reference as the '*castellum de Lauudre*' (Perriam and Robinson forthcoming). In c1350 a pele tower was built on the site of the present castle, and the castle was then subject to repeated expansion, demolition and rebuilding on this site over the next 600 years until it was finally dismantled in 1957. The former Lowther village was located between the twelfth century St Michael's church and the twelfth century castlesteads fortified site and was probably of a similar date. It was subsequently pulled down by Sir John Lowther in 1682 to enlarge his demesne.

3.2.5 **The Park:** The earliest reference to a park is as a deer park in either 1283 or 1337 (Port 1981, 132; Owen 1996), which probably corresponds with the 66 hectare (163

acre) park, shown as the 'old park' on the 1683 map (CROC D/Lons/L/Plans/1683). By 1683 a new, much larger, park had been established which extended south of the castle, and encompassed an area of 283 hectares.

4. DETAIL SURVEY RESULTS

4.1 INTRODUCTION

- 4.1.1 Eight sites were identified during the field survey (LUAU 1997) as candidates for a more detailed survey; of them, three were initially proposed for survey. These were Greatholme Plantation Settlement, Lowther Medieval Settlement and the Lowther Deer Park boundaries. They represent occupation within the extent of the present park from the Romano-British to the medieval periods.
- 4.1.2 In order to provide consistency with the site numbering of the identification survey report is continued within the present report. Component features of each site are numbered in conjunction with the site number, for example feature 11 of site 57 (as numbered within the identification survey) is shown as: 57/11.

4.2 GREATHOLME PLANTATION SETTLEMENT (SITE 57)

- 4.2.1 This is the remains of an enclosed settlement located on the brow of a hill alongside Greatholme Plantation. It has a series of irregular plots and huts structures, butted onto and forming an erratic external enclosure; its form is typical of dated Romano-British settlements in the North West, for example the nearby Ewe Close settlement (Collingwood 1908). The site has been much disturbed by a modern road which cuts the site from the south-west to the north-east and by the construction of the plantation to the south-east. Due to this disturbance, the extent of the settlement to the south is uncertain.
- 4.2.2 The settlement is sub-rectangular in plan and is bounded on its northern side by the external banks of smaller enclosures (57/8, 57/16 and 57/17). To the north of the enclosed settlement is a further lynched bank (57/18), however, this was headland associated with an area of ridge and furrow and post-dates the settlement. To the west the settlement is edged by enclosures 57/7 and 57/8 and to the east by banks 57/12 and 57/13.
- 4.2.3 The internal arrangement of structures is well organised, but superficially has a somewhat haphazard nature, a feature typical of this type of monument. The main element of this site is a broad area devoid of earthworks extending north/south through the centre of the settlement; there are substantial, albeit irregular banks and enclosures defining the edges of this area. It would appear to have been a designed feature, presumably an access route or internal circulation area, which clearly dominated the layout of the enclosure. It extends towards an ill-defined gap between bank 57/16 and enclosure 57/8, which may possibly have been an entrance. Any entrance to the south, on this line, is obscured by the tree growth of Greatholme Plantation
- 4.2.4 The enclosure includes at least four huts, and all are located within the southernmost half of the settlement; the northern half comprises larger internal enclosures, possibly for stock. The possible 'hut-circles' are very varied in size, ranging from 6.7m to 14.9m in diameter, implying functional differences between them; structure 57/4, in

particular, may possibly be a small storage structure. With the notable exception of hut 57/6 all the 'huts' have entrances opening out away from the central access area; hut 57/10 opens out into a small yard (57/11) separated from the central access area by a broad bank. There is an inferred access arrangement to yard 57/11 from the south as there is little evidence of an entrance to the north, however, any point of access from the south is masked by the modern plantation.

- 4.2.5 Huts 57/1, 57/3 and 57/4 all open out onto another small yard, again separated from the central access area. There would appear to be access from this yard into enclosures 57/5 and 57/7, although this entrance has been disturbed by the laying of the modern road. These features appear to define a self contained group of associated huts and stock enclosures. The largest of the huts (57/6) is relatively ill-defined and not particularly prominent, but has been disturbed by root action. It has a relatively flat interior and, by virtue of its size, would appear to be the more important of the structures. It is therefore significant that it does not open out into a yard, but instead into the central access area.
- 4.2.6 The northern part of the settlement is marked by a series of rectilinear plots, bounded by well-defined and prominent banks. They have irregular shapes and sizes, reflecting a seemingly haphazard development: in particular enclosures 57/9 and 57/14 are merged and defined by sinuous banks. The enclosure banks are for the most part prominent, although they are considerably different in their form. The enclosures were probably for stock control, although none of them have marked sunken hollows within the interior, which are a common feature of stock enclosures. The largest and most regularly shaped enclosure (57/8) has a lynchet like bank defining its western boundary, which is indicative of cultivation and there is a possibility that arable farming was also being practised at this settlement.

4.3 LOWTHER MEDIEVAL SETTLEMENT (SITES 34-38, 41 AND 111)

- 4.3.1 **Documentary Context:** Lowther village is located within an area of pasture to the east of Castlesteads Plantation and to the south of the modern road. The medieval settlement is inextricably linked with the ringwork castle of Castlesteads (Site 39); a major road through the settlement extends east from the entrance of Castlesteads. Ringwork type castles have been dated to the eleventh and twelfth centuries and it is tempting to relate the Castlesteads structure to an uncorroborated reference to a '*castellum de Lauudre*' dated to 1174 (Perriam and Robinson forthcoming). The settlement is also adjacent to a twelfth century church (St Michael's) and this would suggest that it was at least of this date: it is likely to have been a planned settlement, established under close manorial control. The village continued to be occupied after the probable abandonment of the Castlesteads fortification c1350 (LUAU 1997).
- 4.3.2 Although the origin of the village is very uncertain its demise is well documented: Nicholson and Burn (1777, 1, 440) quote Machell's MSS (CRO, Carlisle, Dean & Chapter, Machell, vol 1, f123 and vol 3, f37):
- 'The ancient village of Lowther was heretofor considerable, consisting of the hall, the church, the parsonage house, and seventeen tenements, messuages, and cottages, all of which were purchased by Sir John Lowther, in the year 1682,*

and pulled down to enlarge his demesne and pen the prospect of his house, for they stood just in front of it’.

- 4.3.3 **The Medieval Village:** The former settlement extends along two roads which form a 'T' junction. The main road extends east from the entrance of Castlesteads and the lesser village road is a northern off-shoot from the centre of the former village towards the church. The main east/west road is a raised embankment, whereas the north/south road is a hollow way; there is no direct link between these roads and the embanked road would appear to overlie elements of the hollow way. This would suggest that the latest phase of the east/west road (38/11) post-dates and indeed supersedes the use of the hollow-way (41/1).
- 4.3.4 The embanked road (38/11) is shown on the map of 1732 (D/Lons/L/Plans/1732), as the main road between Askham and Newtown and it clearly continued in use following the abandonment of the village. It is possible, therefore, that the embanked nature of the road was a product of later landscaping, however, there is no evidence of the road or track diverting around Castlesteads and the westernmost course of this road is unknown. Running parallel and to the north of the main road is a narrower, and less well-defined road edged by parallel banks, but it is not evident if this ill-defined feature was in contemporary use with the larger road or if it was an earlier feature. It also appears to cut and be superimposed upon the north/south hollow-way, which is also cut by the construction of a circular ditched enclosure (41/26) (LUAU 1997).
- 4.3.5 Along the northern side of the embanked road (38/11) are a series of rectangular house platforms abutting it (38/12, 38/13, 38/14, and 38/16). The number of platforms and density of associated earthworks would suggest that this was the settlement centre. These four building platforms are all rectangular in plan and are relatively uniform in size; they vary from 11.3m to 14.3m in length and from 5.2m to 6.6m in width. They exhibit evidence of internal terracing and were probably house platforms. Two of them were double-bayed buildings (38/13 and 38/14), although no internal entrances were identified and their precise form can not be inferred. In places the embanked road clearly overlies elements of the building platforms, yet there is access onto the road from the huts; this would suggest that the embanking of the road was later than at least some of these structures, but that the structures were still in use when the road was built up.
- 4.3.6 By contrast the platforms alongside the north/south hollow-way (41/1) are few in number (41/2, 41/4 and 41/54), scattered along the length of the road and are more prominent than those adjacent to the east/west road. They are also associated with rectilinear plots (tofts), which are in part edged by lynchets and would appear to have been cultivated. In particular structure 41/4 is attached to cultivation plot 41/3 and is adjacent to a narrow trackway (41/6) which extends east from the road. The structures adjacent to the north/south road are more prominent and have associated plots, unlike those against the east/west road.
- 4.3.7 To the south of the east/west road is a large, artificially terraced platform which follows the line of a natural ridge and has a revetted edge along its western side. Set on top of the terrace are a series of rectilinear plots or crofts, defined by earthen banks; the internal surfaces are artificially level and were probably cultivated

(111/17, 111/18, 111/19, 111/20 and 111/25). Two of the plots had enclosures built into the corners; one was rectangular and the other sub-circular in shape (enclosure 111/14 is 14m across and that within plot 111/20 is 20m x 11m) and both were probably tofts. There was no evidence of structures within the tofts and either there were insubstantial features that have not survived as surface evidence or the crofts were farmed by people living in the main part of the village. The eastern edge of the crofts is overlain by the large and impressive vista extending north-north-west out from the castle. This has resulted in a certain amount of disturbance to the crofts by the placement of the trees, but there is relatively little evidence of earthwork landscaping directly associated with the construction of the vista.

4.3.8 The site is of considerable importance being a fossilised medieval settlement and it has the potential to significantly inform our understanding of medieval nucleated settlement in Cumbria. Castlesteads and the village represent an early stage in the development of the Lowther Estate.

4.4 DEER PARK BOUNDARIES (SITES: 42, 73, 82, 88, 107, 121, 123 AND 124)

4.4.1 **Documentary Study:** The earliest reference to a park at Lowther is to a deer park, which was licensed to Sir Hugh Lowther II either by Edward I in 1283 (Port 1981, 132) or by Edward III in 1337 (Capstick 1996, 3). The first date is the one conventionally accepted by historians, however a recent history of the Lowther family has put forward the second date as being the correct one (Owen 1996).

4.4.2 A deer park was designed for hunting and the provision of meat for the lord of the manor. Deer parks were normally sited on unimproved land typically beyond the arable fields on the edge of the manor, and they usually comprised both pasture to allow the deer to graze and woodland for cover and forage (Cantor 1982, 75). They were often fairly small, typical early examples were between 100 and 200 acres, and were usually bounded by an earthen bank with an internal ditch. The bank was topped by either a fence of oak stakes, a hedge or in some cases a stone wall. Such parks were a common feature of the medieval landscape, and there are many examples which survive, at least as earthworks.

4.4.3 There are no surviving plans specifically of the deer park, but the area in which it lay is marked on a map of 1683 (CROC D/Lons/L/Plans) where it is described as the 'Old Park'. The depiction of the park boundary is very schematic but, by correlating the 1683 map evidence with the field survey data, it is possible to present an interpretive layout of the early park boundary (Fig 4). The evidence for this layout is presented in *Section 5.3*. The site of the deer park lies in the south-east corner of the later park. The southern and eastern deer park boundaries are re-used within the later park. The other sides survive as earthworks and have been plotted as part of the survey. The deer park appears to be a fairly typical size; the licence provided that Sir Hugh Lowther could *enclose two hundred acres of land, of his own demesne land, in Lowther, and to make a Park thereof* (Capstick 1996, 3). Very broadly this corresponds with the park as defined by the survey which was of 163 acres, since there may be differences in the local definition of an acre which would account for any discrepancy. The sub-rectangular shape is more unusual, in that many parks

- tended to be roughly elliptical or circular to keep the perimeter length to a minimum (Cantor 1982, 75).
- 4.4.4 **The New Park:** By the end of the medieval period, many deer parks had gone out of use or were replaced by larger parks, often closer to the manor house (Rackham 1986, 128-129). The park became more of a pleasure ground, both in an aesthetic sense and in terms of the hunt, which evolved into a sporting pursuit, rather than primarily a means of providing meat. Hunting was the main form of amusement for the gentry in the countryside by the sixteenth century, not just deer but rabbit, hares and pheasant (Vandervell and Coles 1980, 24).
- 4.4.5 The replacement of Lowther deer park by a new, larger park had taken place by the end of the sixteenth century. Sir John Lowther III, 1st Baronet, records in his *Memorable Observations* that his great grandfather, Sir Richard, had *repaired the wall about the new Parke and was a great lover of the deer and made the parke staunch* (CROC D/Lons/L/A/1/1 270). Sir Richard died in 1607, and it is evident that the new park had been in existence for some time. The new park (Fig. 6) extended southwards from Lowther Hall, the park pale following the River Lowther south, then continuing on to the village of Whale. The pale then turned eastward along the northern edge of Rowlandfield, joining and following the boundary of the deer park to the centre of its northern side. From there the new park pale turned north until it again reached Lowther Hall. The map of 1683 (CROC D/Lons/L/Plans) shows the new park to be approximately trapezoid, with the narrower end to the north, and the old park sitting in the south-east corner. However, from later maps (see below) and the survey, it is apparent that the area of the old park jutted out eastwards from the line of the eastern park pale (Fig. 4). It is likely that the 1683 map contains a major surveying error, perhaps caused by the difficulty of surveying the far corner of the park where the terrain was heavily wooded, or perhaps more likely a desire to fit the drawing onto a pre-defined piece of parchment.
- 4.4.6 Within the new park pale, hunting was only one of the activities which were carried out. The map of 1683 (CROC D/Lons/L/Plans) shows that there had been deliberate planting of avenues of trees along the top of Burtree Scar. There was also a plantation of trees in the corner created by Rowlandfield and the western boundary, and woodland obviously formed an important role in the aesthetic aspects of the park. Other areas of woodland were important for timber, and Sir John III describes the felling of various woods in 1640, such as Jackcroft, Buckholme and all the old Park (CROC D/Lons/L/A/1/1 270). Sir John also records how some parts of the park were used for arable and he describes the ploughing and liming of parts of the park in 1653 which were later used for oats and barley (CROC D/Lons/L/A/1/1 270). Cattle and horses were also kept within the park, and there is an area, to the west of Burtree Scar marked as the Cow Park on the 1683 map (CROC D/Lons/L/Plans).
- 4.4.7 Hunting was still one of the main functions of the park, as clearly illustrated by the 1683 map (CROC D/Lons/L/Plans). Within the area of the old park, there are depictions of stylised pheasants as well as deer. Next to what appears to be a hunting lodge (probably Decoy House as shown on later maps), a fish pond is marked (now called Decoy Pond). Fish ponds were another important source of protein in the medieval period and were often sited within deer parks (Cantor 1982, 78).

- 4.4.8 **Field Survey:** A series of banked earthworks were recorded which almost entirely surround the area of the former deer park, as depicted on the 1683 map (D/Lons/L/Plans/1683). The form of the banks change considerably around the circumference of the park and there is an implication in some areas that there was more than one phase of boundary. The north-eastern side of the park has two lines of pale boundary: sites 82/4 and 121. The more north-easterly of these (site 121) is a narrow, ill-defined, low discontinuous bank with some limited stone outcropping. It has the appearance of a decayed dry-stone wall, and has relatively little volume, which would suggest that it has been severely robbed. Its form contrasts with the more classic park pale earthworks of sites 82/84 which comprise broad, prominent earthen banks with deep quarry ditches.
- 4.4.9 Around the north-western and south-eastern sides of the park (sites 42, 73 and 107) the line of the former deer park boundary coincides with the new park boundary as shown on the 1683 and 1732 maps. Here the park pale is similar to that of boundary sections 82/84; in places they are very prominent, have wide banks (up to 3m across and up to 1m high in places), with localised quarry ditches and the overall width of the bank and ditches are up to 7m across. The survival of the quarry ditches in these sections are erratic; sites 42 and 73 have only one quarry ditch and site 107 has no surviving ditch.
- 4.4.10 Where the former deer park boundary does not coincide with the line of the later park boundary (as shown on the 1683) map the boundaries do not survive in a particularly prominent form. This would suggest that the original deer park boundary was relatively insubstantial, for example site 123 is very ill-defined and discontinuous, albeit a broad bank. Site 88 is a 2m wide bank with no surviving ditch and yet the continuation of this to the north-east (site 124) survives as a pair of parallel ditches, which are 7m apart, and is more consistent with the classic form of pale boundary.
- 4.4.11 Associated with park boundary site 123, near to Park House, is a small square structure set against the southern side of the boundary. It has insubstantial external banks but incorporates a very substantial terrace. The platform has a square shape (c 15m across) and had a single entrance into the park. It was not a later addition to the pale, as the alignment of pale bank has been adjusted to accommodate the entrance into the park and it is probable that the platform and boundary were contemporary. The platform could have supported a small building, which may have been associated with the park, either a small tower or lodge.

5. DISCUSSION

5.1 GREATHOLME PLANTATION SETTLEMENT (SITE 57)

- 5.1.1 The probable Romano-British settlement (site 57) at Greatholme plantation, unusually, has a sub-rectangular shape; it also has at least three circular hut structures. At Skirsgill Hill, only 3 km to the west of Lowther are two further Romano-British settlements (Quartermaine and Leech forthcoming). The presence of at least four Romano-British settlements within a 3km radius of each other, would, in any other part of the North West, be extremely rare. However, this area of gentle sloping ground between the Eden Valley and the Lake District has one of the largest densities of surviving Romano-British settlement remains in the region, perhaps suggesting a more intensive use of the landscape at that period, than elsewhere in similar environments. Where later farming practices have been more intensive, however, survivability and visibility may have been compromised.
- 5.1.2 The settlement displays many characteristics commonly found within enclosed settlements of the Romano-British period. In particular, the settlement lacks any defensive qualities; there are large gaps in the external boundaries and some, such as the western bank of plot 57/8, have a lynchet profile rather than a raised bank profile. This absence of defensive design contrasts with that of the typical Iron Age enclosed settlements of Northern England, where the external rampart was the key-defining element of the settlement and has been interpreted by the respective excavators as being a primary defensive feature (eg. Alnham, Northumberland (Jobey & Tait 1966) and West Brandon, Durham (Jobey 1962)). The enclosed Romano-British settlements of the North West do not appear to have served the same function as their Iron Age predecessors and possibly reflect the continuity, albeit with subtle adaptation, of the earlier design.
- 5.1.3 The layout of the settlement provides for the grouping of domestic structures and associated yards in one part of the settlement (to the south) and the grouping of enclosures/plots on the opposite side of the settlement. This sort of layout displays the 'kibbutz' like character of other settlements, notably that on Askham Fell (AF 203; Quartermaine and Leech, forthcoming), which also has the huts grouped together and the plots kept separate on either side. Access into the plots was for the most part either from outside the enclosed settlement or independent of the huts, the aim being to separate domestic accommodation from stock areas. By contrast the BS 477 settlement on Barnscar, in West Cumbria (Quartermaine and Leech forthcoming) has a 'Moshav' character; there are three main, separate semi-discrete units each comprising a hut with one or more enclosures, yet all merged into a single enclosed settlement. The emphasis is on the individual farmstead units, which were grouped together.
- 5.1.4 This type of enclosed settlement is typically dated to the Romano-British period, on the basis of a limited number of excavations, eg. Ewe Close, Crosby Ravensworth; (Collingwood 1908) and Waitby (Webster 1972). The finding of a Romano-British brooch within the Barnscar settlement (BS 477) during the excavations by G. de G. Sieveking (Richardson C, pers comm) would appear to confirm it also was of this date. Similarly the Yanwath enclosed settlement, just outside the present park (NY

5193 2598), produced second century pottery from one of the field ditches during excavations in 1936 (SMR 02899).

5.2 LOWTHER MEDIEVAL SETTLEMENT (SITES 34-38, 41 AND 111)

- 5.2.1 The origin of the settlement is very uncertain; there is evidence of pre-Norman activity in the area as evidenced by the hog-backs and associated Norse sculpture in St Michael's the church, but this does not necessarily indicate the existence of a nearby nucleated settlement. Indeed prior to the eleventh century there is very little evidence for nucleated settlement in Northern England, instead dispersed hamlets or farmsteads appear to have been the norm. In areas covered by Domesday book many of the recorded settlement names applied to township areas and not to specific nucleated settlements (Taylor 1983). There is considerable evidence that many of the villages in the North West were planned. Frequently a great similarity of form is displayed between settlements. They are often arranged around a central green and display a regular layout of house platforms and tofts. Regular medieval villages were often associated with castles and built in linear form along the road leading from the gateway (Rowley 1978). Similar examples of planned villages in the Eden valley include Melkinthorpe, which is within the Lowther parish (Roberts 1993).
- 5.2.2 Lowther village displays evidence of deliberate planning, it has two foci; the Castlesteads fortified site at one end and the church at the other, the two linked by an east/west road out from Castlesteads and a north/south road extending towards the church. The settlement is strung along both roads, with a markedly different character to the settlement along the east/west road by comparison with that on the north-south road; the latter being house platforms and associated tofts, whereas those structures adjacent to Castlesteads are small, closely packed without associated plots. To the south of the main east/west street is a large, artificial terrace supporting further crofts and tofts. Both of the principal structures (church and castle) appear to be of eleventh or twelfth century, and the regular distribution of the house platforms and plots suggest a planned development. It seems likely that any planned village development post-dated the positioning of these two fixed points. Although the village may in its present form be contemporary with or post-date the development of the castle and church, this does not exclude the possibility that there was earlier dispersed settlement in the area.
- 5.2.3 By the time of the abandonment of the village it was described by Machell as '*consisting of the hall, the church, the parsonage house, and seventeen tenements, messuages, and cottages*' (Nicholson and Burn 1777, 1, 440). The physical remains of the fossilised village certainly demonstrate a considerable complexity and includes a significant number of house platforms (at least seven) however there are far fewer than the number of houses referred to by Machell. It is therefore probable that some of the documented houses were dispersed away from the present fossilised centre or that many were of too insubstantial a nature to survive as earthworks; it is possible, for example, that there were structures within the tofts of 111/19 and 111/20.
- 5.2.4 The physical remains of the former Lowther village have the potential to provide a valuable insight into the landscape development at Lowther and also into the pattern

of development of nucleated settlement in the Eden valley and North Cumbrian area. As such the site is of considerable archaeological importance.

5.3 DEER PARK BOUNDARIES (SITES: 42, 73, 82, 88, 107, 121, 123 AND 124)

- 5.3.1 The park boundaries are the most significant physical feature of the emparkment of the land. They display the character, the changing form of the park and the status of the park and have the potential to significantly inform the history of the development of the park.
- 5.3.2 The evidence for the layout for the early deer park derives from surface evidence coupled with details from maps of 1683 and 1732 (D/Lons/L/Plans/1683 and D/Lons/L/Plans/1732). Each source has problems and on their own would lead to an erroneous conclusion; the establishment of the real layout depends upon identifying the strengths and weaknesses of the sources.
- 5.3.3 The primary map (1683) is very schematic, particularly in the area of Rowlandfield (Figs 4 and 5), and there is an impression that there is greater consideration to producing a well proportioned, visually pleasing drawing than to survey accuracy. The 'new park' is shown as having a regular trapezoidal shape, although it evidently never had such a layout. Despite this there are sections, notably along the eastern side where the line provides a reasonable correlation with later mapping and indeed with modern boundaries, which enables a reasonable definition of the new park boundary in this section. It also depicts with reasonable consistency the eastern side of Decoy Hag, however, the dog-leg between these two sections is not shown. Such a gross 'discrepancy' is not an unusual feature on mapping of this period (Newman R pers comm) and could potentially reflect a survey error. However, for this type of map it is more likely to reflect a deliberate adjustment of the plan to enable the drawing to fit on a given sized parchment, or alternatively, given the 'designed' nature of the drawing, to provide a well-proportioned shape for the park.
- 5.3.4 The emphasis for the 1683 map is upon the new park, rather than the 'old park' so although an area of woodland is shown in the area of the 'old park' this does not necessarily reflect the extent of the old deer park, bearing in mind that the deer park would have had areas of both pasture and woodland. Only where the limit of woodland, as shown on the 1683 map, corresponds with a pale boundary defined on the ground is it possible to assume that the map depiction relates to the deer park boundary.
- 5.3.5 The 1732 map is of a much better quality and was produced only 50 years after the earliest surviving map; it is therefore probable that the landscape had not changed dramatically in the interim period. Instead the differences are more likely to reflect cartographic differences rather than landscape differences, bearing in mind the schematic nature of the earlier map.
- 5.3.6 The survey evidence shows a series of different boundary lines throughout the extent of the former deer park. Since these features are not intrinsically datable and there are only occasional relationships between the different elements, it is not possible to

provide a chronology or even a relative date for many of these earthwork features in isolation from cartographic sources.

- 5.3.7 **The Old Park:** It is proposed to examine the evidence for each section of the former boundary, working in a clockwise fashion, starting from the decoy pond. As discussed above (*Section 5.3.2*) this element of the new park boundary has been omitted from the 1683 map, however, there is a line shown on the map defining the western edge of the 'old park' wood which extends to the south of Decoy House and Pond. This corresponds with a very prominent park pale boundary (section 73) that was recorded by the survey and it is probable that the line of the wood corresponded with this physical boundary. The later 1732 map shows the edge of the new park following broadly this line, although the line on the 1732 map bends in the middle to the south, whereas the earthwork features bends slightly to the north. There are no other identifiable earthwork features following this approximate line and it is probable that the discrepancy reflects a slight cartographic inaccuracy and that both the old and the new parks followed the same line.
- 5.3.8 The section of old park boundary on the north-eastern side of decoy hag is shown on the 1683 map as following the line of the then new park. This line is very similar to that shown on the 1732 map for the new park, which would suggest that the earlier map is relatively accurate in some sections. This line on the 1732 map corresponds closely with boundary feature 121 which was recorded by the present survey, and clearly differs from the line of banks 82 and 84 which were evidently a post 1732 boundary line.
- 5.3.9 The section of old park boundary on the south-eastern side of decoy hag is also shown on the 1683 map as following the line of the new park and again there is a close correlation between the depictions on the 1732 and 1683 maps. On the ground this would correspond with boundary 42, which, for the most part, had a single quarry ditch; it was not necessarily contemporary with boundaries 84 and 87, which had double quarry ditches for most of their length.
- 5.3.10 On the 1683 map the section of the old park on the southern side of the decoy hag is shown as deviating away from the line of the new park and following the line of Emperor's Drive. It is clearly shown as taking a line to the east of Park House which is depicted. There are no boundary earthworks along this line although there is an alignment of trees following the drive which could reflect formal planting at the edge of the wood (Fig 6). There is, however, a fairly continuous line of pale boundary following the line of the new park to park house (Site 107), then extending to the west towards Rowlandfield (Site 123), before turning north-north-west on a convergent course with Emperor's Drive (Site 88). This section of park pale is in places not particularly prominent, but is broadly continuous and does correspond in form with the other identified sections of this early pale (eg. Site 121). No other subsequent cartographic records show a pale boundary following this line and it does, along with section 124, complete the circumference of the former deer park boundary. Nevertheless, it is at variance with the woodland edge depicted on the 1683 map but this depiction need not necessarily have corresponded with the former park edge, in which case the full extent of the former park was not actually shown on the 1683 map.

- 5.3.11 The remaining section of the deer park, between Emperor's Drive and the Decoy Pond, is shown as the edge of the woodland on the 1683 map and this corresponds with the line of a 7m wide double quarry ditch (site 124) that extends for a length of 139m.
- 5.3.12 **Later Pale Boundaries:** Within Decoy Hagg is a very prominent, classic profiled park pale earthwork (Sites 82 and 84) which had a large prominent bank with quarry ditches on both sides. It was not used as the edge of the park on the 1683 or 1732 maps. It is shown on the 1863 OS 1st edition map as within the Decoy Hagg wood, but did not define the Park at that time. Although it is possible that it had gone out of use by 1683, this would imply that this very prominent and well-built pale boundary had been replaced by a parallel and relatively insubstantial boundary marker. It is much more probable, therefore, that the boundary relates to a line of the park between 1732 and 1863.

6. RECOMMENDATIONS

- 6.1 The results of the present survey has reinforced those of the earlier identification survey (LUAU 1997) and confirmed the remarkable survival of early relict landscapes, which reflects the emparkment of the land and thereby the exclusion of ploughing and its preservation as a controlled wilderness. The earlier report recommended the detailed survey of eight sites or landscapes, of which three have now been further recorded. The present survey has highlighted the archaeological importance of three of the other sites (Sites 5, 9 and 95) recommended for detailed survey.
- 6.2 Site 5 is the Castlesteads Iron Age Enclosed Settlement, which potentially was the predecessor of the Greatholme Plantation settlement (Site 57) and other Romano-British settlements in the region. The site is important not only because of the rarity of Iron Age sites in the North West but also because of the potential for continuity of settlement with Roman sites in the locality.
- 6.3 Site 95 is the settlement at Rowlandfield Plantation. This has some similarities with the form of the Greatholme Plantation settlement (Site 57), as recorded by the present programme of survey, and there is a possibility that the two settlements were contemporary. This enhances the significance of the settlement, particularly in the context of the documented Romano-British settlement in the region.
- 6.4 Site 9 is the Castlesteads defensive ringwork near Lowther Castle and is an integral component of the adjacent Lowther medieval settlement. As such it is of considerable archaeological importance, particularly as it was potentially the original fortified site at Lowther, pre-dating the Peel towers of Lowther castle.
- 6.5 By virtue of the enhanced significance of these monuments, it is pertinent to reinforce the recommendations of the earlier report that these sites should be subject to further detailed survey recording.

7. GAZETTEER

The individual site features are numbered as sub-elements of the identification survey site numbers and will therefore provide a direct correlation between the two reports.

7.1 GREATHOLME PLANTATION SETTLEMENT

Site No. 57

Monument No. 57/1
Site Name Greatholme Plantation
Type: Hut ?
NGR: NY 52800 23071
Period Romano-British
Diameter: 14.6m

Small sub circular hollow extending to and located along the southern edge of the modern fence line. The regular nature of the sloped edges alongside the undulating base indicate that this hollow may be a hut structure.

Monument No. 57/2
Site Name Greatholme Plantation
Type: Hut/enclosure ?
NGR: NY 52809 23081
Period Romano-British
Length: 7.9m *Width:* 2m

Small semi-circular hollow located in the corner of the field west of Greatholme plantation adjacent to feature 57/1 and butting enclosure 57/3. Whilst the regular form and nature suggest that this was a small hut, it would appear to have been truncated by hut 57/3.

Monument No. 57/3
Site Name Greatholme Plantation
Type: Hut/enclosure
NGR: NY 52806 23088
Period Romano-British
Length: 16.8m *Width:* 11m

A well defined sub-rectangular structure situated adjacent to the north west corner of Greatholme Plantation and butting enclosure 57/2. This structure comprises a 'U' shaped bank, 0.25m high, although evidence of stones within this bank suggest that it may well form the remains of a stone structure, with an entrance on its western side. Internally it comprised a shallow, concave, platform dipping slightly towards the centre. It is internally terraced.

Monument No. 57/4
Site Name Greatholme Plantation
Type: Hut/enclosure
NGR: NY 52792 23102
Period Romano-British
Length: 6.9m *Width:* 8.7m

A small, ill defined, internally terraced structure, sub-circular in plan, with a relatively level internal area, defined by a low bank and a possible entrance located to the south-west.

Monument No. 57/5
Site Name Greatholme Plantation
Type: Enclosure
NGR: NY 52799 23111

Period Romano-British

Length: 30.5m *Width:* 15.4m

A rectilinear plot defined by broad banks to the east, west and south. This plot whilst cut by the modern road 57/21 has an undulating internal surface.

Monument No. **57/6**

Site Name Greatholme Plantation

Type: Hut structure

NGR: NY 52804 23100

Period Romano-British

Length: 14.8m *Width:* 13.1m

A well defined and prominent sub-circular structure located to the south-west of the settlement comprising a sub-circular enclosure which butts a linear ditch (57/5) with an entrance to the east. Internally it comprises a terraced platform with no direct access to the yard to its west; it opens out onto a central access area.

Monument No. **57/7**

Site Name Greatholme Plantation

Type: Enclosure

NGR: NY 52779 23119

Period Romano-British

Length: 39.7m *Width:* 38.8m

A rectilinear plot bounded by a well defined bank to the west and north and a less substantial bank to the east. This plot acts as the external boundary of the settlement on its western side and has access to further rectilinear plots (57/3,7).

Monument No. **57/8**

Site Name Greatholme Plantation

Type: Enclosure

NGR: NY 52780 23146

Period Romano-British

Length: 23m *Width:* 17m

A rectilinear plot located to the north of enclosures 57/7 and 57/5 with a possible entrance at its south east corner. This plot is not associated with any building structures within the settlement and may have served as stock control, however, the bank to the east of the plot has a lynchet profile and could potentially have been a product of cultivation.

Monument No. **57/9**

Site Name Greatholme Plantation

Type: Hut/enclosure

NGR: NY 52823 23136

Period Romano-British

Length: 27.7m *Width:* 17.8m

An small, well-defined enclosure to the south of track 14 which may represent a second cell within a larger enclosure. It contains a level platform and shallow banks extending along three sides.

Monument No. **57/10**

Site Name Greatholme Plantation

Type: Hut

NGR: NY 52838 23120

Period Romano-British

Length: 18m *Width:* 14.9

A small sub-circular enclosure bounded by shallow banks and an entrance on its western side with an internally terraced platform and direct access to rectilinear enclosure 57/11.

Monument No. 57/11
Site Name Greatholme Plantation
Type: Enclosure
NGR: NY 52831 23112
Period Romano-British
Length: 15.7m **Width:** 5.6m

A rectilinear yard which has been truncated by the construction of the modern wall surrounding Greatholme Plantation. It is defined by shallow banks and has direct access from a hut enclosure (57/10).

Monument No. 57/12
Site Name Greatholme Plantation
Type: Bank
NGR: NY 52849 23142 - 52862 23121
Period Romano-British
Length: 24.7m **Width:** 5m

A linear bank located to the east of hut enclosure 57/10 and comprises an earthfast shallow sided bank. This bank has no direct association with other monuments within the settlement and may represent a component of the external boundary of the settlement.

Monument No. 57/13
Site Name Greatholme Plantation
Type: Linear Boundary
NGR: NY 52821 23199 - 52847 23163
Period Romano-British
Length: 43.9m **Width:** 4.2m

A roughly linear bank located to the east of the rectilinear enclosure bounded by bank 57/15 and comprises an earthfast shallow sided bank. This bank has no direct association with other monuments within the settlement and may represent a component of the external boundary of the settlement.

Monument No. 57/14
Site Name Greatholme Plantation
Type: Enclosure/plot
NGR: NY 52811 23157
Period Romano-British
Length: 14.4m **Width:** 7.1m

A small plot linked to plot 57/15, it has an irregular shape and a slightly sunken interior.

Monument No. 57/15
Site Name Greatholme Plantation
Type: Linear Boundary
NGR: NY 52809 23179 - 52838 23148
Period Romano-British
Length: 43.1m **Width:** 12.1m

A roughly linear bank located to the north of the enclosure 57/14 and to the west of bank 57/13. It comprises an earthfast shallow sided bank. This bank forms a component of an internal sub group of rectilinear enclosures bounded by similar banks.

Monument No. 57/16
Site Name Greatholme Plantation
Type: Linear Boundary
NGR: NY 52803 23174 - 52789 23166
Period Romano-British
Length: 15.1m **Width:** 4.3m

A linear bank located to the north of the central access area and comprises an earthfast shallow sided bank. This bank has no direct association with other monuments within the study area, although it does appear to be in an alignment with the northern boundary of rectilinear enclosure 57/8 and may represent the remains of a further rectilinear enclosure.

Monument No. 57/17
Site Name Greatholme Plantation
Type: Linear Boundary
NGR: NY 52802 23186
Period Romano-British
Length: 14.3m **Width:** 5m

A small, linear bank located alongside the modern road which may have been truncated by its construction. It comprises an earthfast shallow sided bank which has no direct association with other monuments within the study area.

Monument No. 57/18
Site Name Greatholme Plantation
Type: Bank
NGR: NY 52813 23211 - 52748 23172
Period Romano-British
Length: 76.3m **Width:** 3.9m

A well defined bank to the north of surviving enclosures which may represent the northern boundary of the settlement. It does, however, have a different character to other banks within the settlement and may represent a later phase of activity within the study area.

Monument No. 57/19
Site Name Greatholme Plantation
Type: Bank
NGR: NY 52734 23185 - 52739 23152
Period Romano-British
Length: 32.6m **Width:** 2.9m

A sub-rectangular enclosure which is truncated by the modern fence line and subsequent ploughing of the field to the west. This feature is defined by an earthfast shallow sided bank and has a direct association with linear boundary 57/18 and as such may represent a component of a later phase of activity.

Monument No. 57/20
Site Name Greatholme Plantation
Type: Ridge and furrow
NGR: NY 52745 23145 - 52761 23106
Period Post-medieval
Length: 42.4m **Width:** 7.7m **Height:** 0.30m

An area of ridge and furrow located adjacent to the modern fence line to the west of other features. This ridge and furrow appears to respect the surviving enclosure remains.

7.2 LOWTHER MEDIEVAL SETTLEMENT

Sites 38, 41 and 111

Monument No. **41/1**
Site Name Lowther Medieval Settlement
Type: Bank/Road
NGR: NY 51990 24236
Period Medieval/Post-medieval
Length: 173.6m *Width:* 5.8m

A large, prominent and substantial break of slope which defines the edge of the road which runs through the medieval settlement. It has a very distinct edge at the top end and a very ill-defined slope at the bottom. It is better defined to the south and gets less well-defined to the north where it is truncated by the landscape feature 26. It is most substantial opposite features 41/4 and 41/5. At the southern end it has a slightly irregular profile as a small track has levelled a section of it. This could potentially be a later feature.

Monument No. **41/2**
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51987 24298
Period Medieval/Post-medieval
Length: 11.2m *Width:* 10.3m *Height:* 0.45m

A sub-rectangular house platform with a slightly uneven surface on the eastern ill-defined gentle slope of the road. It is raised up to 0.45m from the bottom of the road on its western side and is raised 0.3m on the east. It is slightly concave in the middle, the slope being very gentle, and is evidently a house platform.

Monument No. **41/3**
Site Name Lowther Medieval Settlement
Type: Cultivation Plot
NGR: NY 51997 24260
Period Medieval/Post-medieval
Length: 17.9m *Width:* 17.7m

A rectangular plot with two large stones at the western end set into the boundary. It is defined by a break of slope, which is almost lynchet-like, and would suggest that this plot was cultivated. It has a more prominent lynchet profile on the upper slope to the east. The southern boundary is a very broad and ill-defined, low bank which merges with house platform 4. There seems to be a series of boundaries extending out from the road, particularly on the eastern side. The area inside the plot is slightly undulating, possibly reflecting later activity.

Monument No. **41/4**
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51997 24246
Period Medieval/Post-medieval
Length: 12.3m *Width:* 7.7m *Height:* 0.45m

A prominent earthwork, particularly on the western side, with a hollow in the middle. It is almost a platform as it is cut into the slope on the eastern side. There are a couple of stones protruding from the turf but not very many. It is very well defined to the west where there is a prominent bank which is up to 0.45m above the base of the road. To the east it is ill-defined and is more a break of slope. The hollow internal area is very irregular and would imply a certain amount of collapse into the interior. Immediately to the west is a well-defined road.

Monument No. **41/5**
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51994 24229
Period Medieval/Post-medieval

Length: 13.2m *Width:* 6.8m

A rectangular structure which is set into the bank to the west, of the terraced edge of the road, and is also sunken with respect to the base of the road to the east. It is particularly prominent to the west and south and less well-defined to the east and north. The base is relatively flat but slightly undulating and is more of a cut feature than a platform. There is quite a lot of stone particularly on the south and west sides indicating that it had a stone foundation.

Monument No. **41/6**

Site Name Lowther Medieval Settlement

Type: Track and Plot

NGR: NY 52032 24246

Period Medieval/Post-medieval

Length: 37.3m *Width:* 1.7m

A break of slope with a lynchet profiled almost terraced bank that extends out from the centre of the main road of the medieval settlement. There is a hollow between this and house platform 4 and there is a possibility that it served as a route or track at some stage. The main prominent break of site 7 curves round at this point linking it with this feature. It continues beyond what is shown on the plan and carries on across the main vista. This seems to be the edge of a substantial plot which is quite irregular in shape and is almost raised with a break of slope on the northern side. It runs parallel to a series of three small banks, probably other plots, running out east from the medieval settlement.

Monument No. **41/7**

Site Name Lowther Medieval Settlement

Type: Break of Slope

NGR: NY 52007 24213

Period Medieval/Post-medieval

Length: 52.2m *Width:* 5m *Height:* 1m

A prominent break of slope with a very sharply defined upper edge and a few stones protruding from the upper surface. It defines the eastern side of the road but at the southern end it is ill-defined. It is very uniform along its length; it continues to the south of feature 41/9 as a very gentle break of slope.

Monument No. **41/8**

Site Name Lowther Medieval Settlement

Type: Break of Slope

NGR: NY 52039 24194

Period Medieval/Post-medieval

Length: 110.3m *Width:* 20m

A very gentle break of slope which runs down from the ridge which is now the vista for Lowther Castle. The feature is an enhanced natural feature.

Monument No. **41/9**

Site Name Lowther Medieval Settlement

Type: Break of Slope

NGR: NY 52017 24163

Period Medieval/Post-medieval

Length: 13.2m *Width:* 10.3m

A small ill-defined plot which is adjacent to the north/south hollow-way.

Monument No. **41/10**

Site Name Lowther Medieval Settlement

Type: Road

NGR: NY 52001 24146

Period Medieval/Post-medieval

Length: 46.8m *Width:* 5.4m

An east/west oriented linear feature comprising a ditch with a bank on either side which appears to form the rear boundary of, or a trackway for, a set of platforms to the south. There is an extension of it in the form of a ditch to the west and could possibly show it is a hollow-way or track that ran parallel to the road (site 38/11), or alternatively a later line of road as it does not go directly to Lowther Medieval Settlement which may have been out of use at this time. It cuts across the main north/south road feature (site 1) suggesting that it post-dates site 1.

Monument No. 38/11
Site Name Lowther Medieval Settlement
Type: Road
NGR: NY 51997 24127
Period Medieval/Post-medieval
Length: 106.4m **Width:** 9.8m

This road extends out from Castlesteads eastwards. It is a very prominent flat topped bank, particularly prominent on the eastern side. To the west it is not as well defined and does not have a particularly flat top. To the immediate south of site 12 the road is cut by a substantial ditch which appears to relate to the medieval settlement, and this would suggest that the road was no longer in use during at least the final phase of the medieval settlement. The road leads directly up to the entrance of Castlesteads with no apparent attempt to avoid it implying that the road relates to Castlesteads and the village earlier phases. It has been built up on the eastern side and there is no obvious merge between this road and the north/south main road boundary (site 41/1) which may argue that this east/west road is a later feature that has been built up.

Monument No. 38/12
Site Name Lowther Medieval Settlement
Type: House Platforms
NGR: NY 51998 24137
Period Medieval/Post-medieval
Length: 13m **Width:** 11m

A ill-defined bank forming a rectangular shape which is broad to the south and defines a break of slope with a lynchet-like profile to the west. It is truncated by the main road boundary (site 41/1) and is internally terraced, particularly to the west. It lies between three existing earthworks; the main road boundary (site 41/1), the east/west road (site 38/11) and the double-banked trackway (site 38/10).

Monument No. 38/13
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51985 24133
Period Medieval/Post-medieval
Length: 13m **Width:** 5.2m

A rectangular structure with a very ill-defined break of slope in the centre which defines a partition. It butts against a main bank which separates it from site 14 and is constructed against, or overlain by, track 38/11.

Monument No. 38/14
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51974 24135
Period Medieval/Post-medieval
Length: 7m **Width:** 4.8m

A square platform made up of very low banks. It is divided from site 15 by another lower bank which is only just visible and it is possible that these two sites may link up to form one building with two rooms. If so the building would have typical dimensions for an average sized medieval building of two bays.

Monument No. 38/15
Site Name Lowther Medieval Settlement
Type: House Platform
NGR: NY 51967 24135

Period Medieval/Post-medieval

Length: 6.7m *Width:* 6.8m

A square platform made up of low banks which is divided from site 14 by another lower bank which is only just visible. It is possible that these two sites may link up forming a two roomed building.

Monument No. **38/16**

Site Name Lowther Medieval Settlement

Type: House Platform

NGR: NY 51953 24135

Period Medieval/Post-medieval

Length: 11.3m *Width:* 5.7m

This site comprises a slightly curvilinear bank which has been terminated at the west end by a tree and butts against the east/west road (site 38/11). The implication is that the road has been built up and partially overlies the bank. This is a possible rectangular structure, however there is no western edge.

Monument No. **111/17**

Site Name Lowther Medieval Settlement

Type: Croft

NGR: NY 52069 24117

Period Medieval/Post-medieval

Length: 23.3m *Width:* 28.1m

This croft is avoided by road 38/11 which may suggest that they were contemporary. It is defined by two east/west banks leading up to a built up exaggerated scarp edge at the western end. There is evidence of revetment in the bank and evidence that the crofts have been built on a terraced platform. Access is from the north from road 38/11.

Monument No. **111/18**

Site Name Lowther Medieval Settlement

Type: Croft

NGR: NY 52074 24091

Period Medieval/Post-medieval

Length: 24.7m *Width:* 33.6m

A rectangular croft very similar to site 111/17. There is a terraced edge to the east and a very exaggerated terraced scarp edge to the west, both of which are artificial. The internal surface is relatively level and indicates that it may have been cultivated at some time. In the corner of this croft is a rectangular feature (site 19), which is a possible toft.

Monument No. **111/19**

Site Name Lowther Medieval Settlement

Type: Toft/structure

NGR: NY 52084 24079

Period Medieval/Post-medieval

Length: 14m *Width:* 13.4m

A rectangular bank set into the south-east corner of croft 18 which is possibly the site of a domestic structure or even possibly a toft. It is very ill-defined and there is no evidence of an obvious entrance. The internal area is slightly raised which suggests it was a platform.

Monument No. **111/20**

Site Name Lowther Medieval Settlement

Type: Croft

NGR: NY 52084 24055

Period Medieval/Post-medieval

Length: 30m *Width:* 25.8m

A rectangular plot with an oval shaped structure in its south-eastern corner. The banks are particularly ill-defined with a large amount of material deposited on the northernmost one which is better defined than the rest. This

internal structure is contemporary with the eastern terrace edge and the defining bank between plots 111/20 and 111/25.

Monument No. 111/21
Site Name Lowther Medieval Settlement
Type: Trackway
NGR: NY 52064 24036
Period Medieval/Post-medieval
Length: 67.2m **Width:** 3.5m

A former road structure and runs along the base of the scarp edge and there is access from this into plot 111/20 implying a contemporary relationship between this section of track and the toft. Above it, further up the scarp, is another scarp which goes directly through all of the tofts, this is much later as it also cuts the scarp and both roads at an angle.

Monument No. 111/22
Site Name Lowther Medieval Settlement
Type: Bank
NGR: NY 52071 23968
Period Medieval/Post-medieval
Length: 141.2m **Width:** 3.4m

This large bank runs north from the castle and then turns Northwest where it meets ditch 111/23. The north/south section is well-defined and more prominent on its western side, its eastern side butts the scarp slope. The north-west/south-east section is much less well-defined and deteriorates along its length until it is virtually flattened out at the junction where it meets ditch 111/23. Together these two features seem to define a somewhat lozenge-shaped area with an open southern end, possibly due to landscaping associated with the castle.

Monument No. 111/23
Site Name Lowther Medieval Settlement
Type: Ditch
NGR: NY 52033 23952
Period Medieval/Post-medieval
Length: 125.6m **Width:** 4.2m

A ditch which runs north/south and at its northern end meets bank 111/22 with which it forms a lozenge-shaped enclosure, the southern end of which may be open but has possibly been destroyed by landscaping associated with the castle.

Monument No. 111/24
Site Name Lowther Medieval Settlement
Type: Hollows
NGR: NY 51999 24015
Period Medieval/Post-medieval
Length: 8.3m **Width:** 5.7m

A series of three indistinct hollows at the northern tip of the area enclosed by sites 111/22 and 111/23.

Monument No. 111/25
Site Name Lowther Medieval Settlement
Type: Enclosure
NGR: NY 52098 24028
Period Medieval/Post-medieval
Length: 33.5m **Width:** 22.9m

A very large enclosure defined to the east by a negative terraced edge and a scarp slope to the west. It has been disturbed by the modern track which runs through it. There is access into the enclosure from track 111/21. There is no evidence of internal structures here.

Monument No. 111/26

Site Name Lowther Medieval Settlement
Type: Ring plantation?
NGR: NY 51964 24317
Period Medieval/Post-medieval
Diameter: 32.3m

A very regular, circular earthwork comprising a slightly raised very flat surfaced platform which is slightly higher than the adjacent ground surface. It is edged by a 0.3m deep ditch. It is very regular, well-defined and totally distinct from adjacent features associated with the medieval settlement which are very irregular and haphazard. It is probably a landscape feature, possibly a small ring plantation, later than the medieval settlement. It appears to cut the hollow-way which extends down through the medieval settlement.

7.3 DEER PARK BOUNDARIES

Sites No. 42, 73, 82, 83, 88, 94, 107, 121, 123 and 124

Site No: 42
Site Name: Round Hill
Site Type: Bank Boundary - Park Pale
NGR: NY 5392 2245 - 5383 2222
Period: Medieval/ post-medieval
Grading: 2
Sources: Field Survey

A prominent bank, with a rounded profile which extends for 243m down-slope within Decoy Hag. It defined the easternmost park pale boundary. It is up to 3m in width and has a ditch on the eastern side. It extends down-slope from boundary 82 and 121; it is crossed by road 122. At the southern end it peters out and its line is continued after a substantial gap by bank 107.

Site No: 73
Site Name: Decoy Hag
Site Type: Deer Park Pale
NGR: NY 53442 22894
Period: Medieval/post-medieval
Sources: Field Survey; Cartographic

A 300m long, prominent 1.2m high linear bank running north-east/south-west with a 4m base width and a 1m top width. It is earthfast with some protruding stone and runs parallel to a field boundary for most of its length. This bank corresponds with the former original deer park boundary and turns at its eastern end to join another boundary bank (site 82), but the exact junction has been destroyed at the crossing of the modern field boundary. It is currently composed of two distinct elements. It has a single erratic quarry ditch.

73/1 A length of bank some 120m in length which forms the southern end of 73. It is aligned south-west to north east and forms a linear boundary. At its northern end the bank becomes less well defined and is much more disturbed by modern activity within the area. The southern extreme is much more assured and any disturbance beyond the point recorded may be of a much earlier period.

73/2 A linear bank some 365m in length located to the north of an extant field. Its southern end is situated some 47m from the southern section and is similarly disturbed. At its northern end, this bank transcribes a corner to the south and follows a line with a further section of boundary (82). At its northern extreme it is truncated by the modern road.

Site No: 82
Site Name: Decoy Hag
Site Type: Park Pale
NGR: NY 53632 22796
Period: Medieval/post-medieval
Sources: Field Survey; Cartographic (1863, 1st edition OS map)

A 650m long section of broken banking running roughly north-west/south-east, except at its southern end where it turns sharply to the south and probably continued down to site 107. The bank is earthfast but there is some protruding stone as a result of erosion. It is 3m wide at its base and stands to up to 1m high in places. The site has suffered considerable disturbance due to small scale extraction and herds of stock. It is very prominent.

82/1 An uninterrupted section of pale some 365m in length at the northern end of the park pale (82). It is aligned north to south and assumes a route through Decoy Hag. Its well defined nature and relative width may indicate that this is a later boundary than the linear bank to the east (121).

Site No: **83**
Site Name: Decoy Hag
Site Type: Bank
NGR: NY 53936 22397
Period: Medieval/post-medieval
Sources: Field Survey

A length of bank measuring 2m wide and standing to 0.8m in height. The site continues outside the survey area but its rounded profile and accompanying small ditch is very similar to other features in the area. Although it does not directly relate to any of the other sites in the area, there is a possibility that it defined an element of enclosure associated with the park.

Site No: **84**
Site Name: Decoy Hag
Site Type: Bank
NGR: NY 53798 22484
Period: Medieval/post-medieval
Sources: Field Survey
SMR: N/A

A 200m long stretch of broken bank running roughly parallel to site 82. The site is 2m wide at the base and stands to 0.8m high in places. The bank's form and straightness suggests a later date of construction. The site fades out due to disturbance in the woodland and does not seem to be directly related to other sites in the area. It follows the line of a tree avenue, cuts across the line of site 82 and continues the line of road 122.

Site No: **88**
Site Name: Morris Brow
Site Type: Deer Park Boundary
NGR: NY 52851 22339
Period: Medieval/post-medieval
Sources: Field Survey

A 350m long rounded bank running along the top of a scarp slope. It measures 1.5m to 2m wide and stands up to 0.5m high in places. The northern end of the site has probably been destroyed by the landscaping that took place on the Empress drive and the southern end seems to fade out, however, site 94 may be a short continuation. This site (88) was possibly part of the deer park boundary, but is not shown on the 1732 map (D/Lons/L/Plans/1732) and was possibly also not on the 1683 map (D/Lons/L/Plans/1683)

Site No: **94**
Site Name: Parkhouse Plantation
Site Type: Deer Park Boundary?
NGR: NY 52947 22043
Period: Medieval/post-medieval?
Sources: Field Survey

A low, broad 25m long length of bank measuring about 6m wide at its base and standing to only 0.6m. The site is on the line of site 88 and maybe a continuation of this site. Similarly site 123 is a continuation to the south.

Site No: **107**
Site Name: Parkhouse Plantation

Site Type: Park Pale
NGR: NY 53648 22132
Period: Medieval/post-medieval
Sources: Field Survey

A 390 m long earthfast bank which runs along the side of the road apart from at its eastern end where it is cut by the road. The bank is 3m wide and stands to 0.6m high, but is now heavily broken in places and does not run past the farm. It is very probable that it continued on to join with site 109. This site is part of the former Park Pale.

Site No: **121**
Site Name: Decoy Hag
Site Type: Relict Boundary
NGR: NY 5359 2298 - 5392 2245
Period: Medieval/post-medieval
Sources: Field Survey; OS 2nd edition map (1899)

A 615m long line of a discontinuous and very decayed former dry-stone wall, which extends along the north-eastern edge of the Decoy Hag wood. It is associated with lines of trees and stumps and survives as an alignment of stones and a low bank; there is no associated ditch. At its south-eastern end it merges with the line of the later and more prominent park pale (site 42). It is shown on the OS 1st edition map 1863 as the field boundary on the edge of the Decoy Hag woodland. The bank stands to only about 0.25m in place and there is insufficient volume within the bank to have made up an effective boundary against deer and has either been robbed or was mainly a timber fence. The boundary is very slight by comparison with the adjacent 82/84 boundary.

Site No: **123**
Site Name: Park House
Site Type: Relict Boundary
NGR: NY 5322 2195 - 5397 2195
Period: Post-medieval
Sources: Field Survey

A 252m long, discontinuous section of bank running along the edge of a limestone scarp edge. In places the bank merges with an area of outcropping stone, and consequently is ill-defined. It extends up from the line of the Park Pale (107/109) towards bank 94. At the eastern end is a rectilinear platform butting against the bank, which may be a later feature. The bank comprises a line of stone material, which, in places, is up to 3m across. There is no associated ditch. This would appear to correspond with the former deer park pale. Associated with park boundary Site 123, near to Park House, is a small rectangular structure set against the southern side of the boundary; it has insubstantial earthwork external banks but incorporates a very substantial terrace. The platform has a square shape and is *c* 15m across and had an entrance extending into the park. It was not a later addition, as the alignment of pale bank has been adjusted to accommodate the entrance into the park and it is probable that the platform and boundary were contemporary. The platform could have supported a small building, which may have been associated with the park, either a small tower or lodge.

Site No: **124**
Site Name: Morris Brow
Site Type: Deer Park Pale
NGR: NY 5298 2259 - 5287 2249
Period: Medieval/post-medieval
Sources: Field Survey; 1683 park map (D/Lons/L/Plans/1683)

A 153m length of relict boundary, which survives as a pair of parallel ditches which are 7m apart and are each 1.5m in width. The central bank has been either degraded or physically removed and only survives in a limited number of places as a very low, ill-defined mound. The ditches are fairly shallow and in places ill-defined. Its form is consistent with an earthen park pale and follows the line of the deer park boundary shown on the 1683 map.

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D/Lons/L/A/1/1

270, 1640 *Memorable observations and remembrances of the house and grounds at Lowther, and the quality and condition thereof, so far as I know, or have been informed, a satisfaction to posterity what alterations and changes happen according to the several opinions, and pleasures of the succeeding owners*
John Lowther, knight, baronet

8.1.2 *Plans*

D/Lons/L/Plans

1683 *A Survey of Lowther Park taken in April 1683 belonging to the Honourable Sir John Lowther Knight and Baronet*

1732 *A Survey of Lowther and Lands Adjoining, July 1732, scale 40 chains:5"*

239, 1754 *A General Plan of the Park and Gardens etc. at Lowther Hall.*

462, 1763 *Plan for the intended alterations at Lowther Hall showing proposed layout for gardens, Lancelot Brown, 2 chains:1"*

8, 1771 *Plan for intended gardens at Lowther Hall, Lancelot Brown, 1 chain:1"*

1807 *Plan of the park and demesne lands at Lowther, John Webb, 5 chains:1"*

D/Lons/L5/Plans

L5/3 1 box of small plans (x13)

8.1.3 *Published Cartographic Sources*

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APPENDIX 1
PROJECT BRIEF

APPENDIX 2
PROJECT DESIGN

**Lancaster
University
Archaeological
Unit**

May 1996

**ARCHAEOLOGICAL SURVEY OF LOWTHER PARK
CUMBRIA**

ARCHAEOLOGICAL SURVEY

PROJECT DESIGN

Proposals

The following project design is offered in response to a request from Capsticks for a primary survey of the Lowther Park. The proposed project involves the first phase of a survey programme to identify, locate and evaluate archaeological and historical features within the park. The purpose of the survey is to enhance the existing archaeological record and allow appropriate management strategies to be enacted.

1. INTRODUCTION

- 1.1 Within the last ten years much survey work has been undertaken around the area of Lowther Park and this has highlighted a considerable wealth of archaeological remains extending as far back as the Neolithic; one of the largest funerary long cairns in the region is located just outside the park boundary (NY 537243). Many of the identified features, however, have been attributed to either the Bronze Age or medieval periods. The SMR record within the park has demonstrated the existence of some significant sites, such as the Castlesteads hillfort (SMR 2900), and a Romano British enclosed settlement at Cragside wood which are both Scheduled Ancient Monuments. Although some significant sites have been identified, the present archaeological record of Lowther Park is deficient, by comparison with areas outside because of the absence of intensive reconnaissance. On the basis of similar upland park surveys (particularly the Lyme Park estate in Cheshire) it is anticipated that a level one survey would increase the identified archaeological resource by as much as a factor of ten and would significantly improve our knowledge of the historical content and significance of the landscape.

This park is itself a feature of historical interest, but this project is not intended to be an historic landscape assessment, concentrating on the park's development. However, it will provide the appropriate survey information which can be used in such an assessment.

Capsticks, in conjunction with the Lake District National Park Authority (LDNPA) and English Heritage have requested the implementation of a level 1 archaeological survey of the park (see appendix 1) along with a selective level 2/3 survey.

- 1.2 The total area of the park estate is about 5.7 sq km, although the area around the castle (0.55 sq km) and the church has been excluded from the survey leaving an area of 5.15 sq km to be surveyed.
- 1.3 LUAU has considerable experience of the evaluation, survey and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. In addition, advice has been supplied to clients for the preparation of Environmental Statements. LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

LUAU has undertaken a large number of upland landscape surveys for a variety of clients (both private and national agencies such as English Heritage and RCHM(E)) and employs a qualified surveyor (Jamie Quartermaine BA DipSurv MIFA) who has many years experience of the identification and survey of upland landscapes, having worked closely with the Royal Commission on the Historical Monuments of England and the Lake District National Park Authority on a number of projects. Similar projects to the one envisaged here include the Lake District National Park Survey, Ennerdale Forest Survey, the Arnside/Silverdale AONB Rapid Identification Survey and the Haweswater Estate Survey. LUAU is presently undertaking a full analytical survey of Lyme Park estate (Cheshire) for the National Trust.

- 1.4 The following project design specification sets out the objectives of the project, provides a methods statement demonstrating how these can be met and defines the resource implications of the methods statement.

2. OBJECTIVES

- 2.1 The primary purpose of the project is to inform future management decisions with regard to conservation matters relating to the archaeological content of the park land. The aims of the project are set out within the brief produced by the Lake District National Park Archaeologist and are as follows:
- a) To produce a desk based study, paying particular attention to the records within the Sites and Monuments Record and to aerial photographic records.

- b) To initiate a level 1 field survey of all identified sites and features to indicate relative significance within the extent of the park but exclude the Lowther Castle and gardens and Lowther Church. This will provide a preliminary grading of all recorded sites and features to indicate relative significance.
 - c) To undertake a programme of level 2 survey at selected sites within the park, which will include: Castlesteads hillfort, a sub-rectangular earthwork south of the church, Romano-British settlement at Cragside wood, and the site of the Lowther abandoned village, and the deer park.
- 2.2 The following programme has been designed to provide an archaeological survey of the Lowther park, set within a broader landscape context. It is important that the individual sites are not simply viewed as isolated points on a map, but that some attempt is made to indicate their group value and their importance to the historical fabric of landscape character areas within the park.

3. METHODS STATEMENT

The following work programme is submitted in line with the objectives of the archaeological work summarised above. It is divided into three elements, desk based research (including aerial photographs), archaeological field survey and reporting.

3.1 *Desk-based research*

The following will be undertaken as appropriate, depending on the availability of material and with due regard to budgetary and timetable constraints. The method statement is based on the *Standard and Guidance for Archaeological Desk-based Assessments* compiled by the IFA.

Documentary and cartographic material should concentrate on two sources of information the County Sites and Monuments Record (SMR), and readily accessible archive material contained in the County Record Office and held by Lowther Estates. Such material is likely to include early maps, (including estate plans etc.), surveys, rentals, and post-medieval deeds, as well as photographs, topographic prints and 18th and 19th century antiquarian histories and topographic guides. It will also be important to identify the history of planting and park management. Published secondary sources and LUAU's own database will also be considered. Particular attention will be paid to place-names recorded on early cartographic sources as these often provide important evidence of archaeological activity. It is understood that Capsticks have collated a significant amount of documentary material and this will be evaluated in advance of visits to the record offices.

A survey of the extant air photographic cover will be undertaken. This will aid the identification of surviving archaeological and structural features, that are not obscured by forestry. Aerial photographic collections to be consulted will include obliques held by the Royal Commission on the Historical Monuments of England based in Swindon, and photographs held by the County SMR and the Lake District National Park Authority.

A rapid compilation of geological (both solid and drift), pedological, topographical, and palaeoenvironmental information will be undertaken, using information available from the Ordnance Survey and ADAS. This will not only set any archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field investigation.

The data generated during the desk-based study will provide the basis for an assessment of the nature and significance of the known surface and subsurface remains. It will also serve as a guide to the archaeological potential of the park.

3.2 *Level 1 Field Survey methodology*

In the first instance Lowther Estates should contact all tenants or commoners in writing, before the start of field work. LUAU request that a map detailing the properties of all landholders is made available to them so that their representatives can make contact on the ground with the landholders prior to entry.

The survey will involve three discrete stages: Reconnaissance, Mapping, and Description.

3.2.1 Reconnaissance

The reconnaissance will consist of close field walking, varying from 25m - 50m line intervals dependant on visibility (as affected by tree density), terrain and safety considerations. All sites noted will be recorded. The survey will aim to identify, locate and record archaeological sites and features on the ground. Those sites already contained within the County Sites and Monuments Record will be checked against their entry and this will be enhanced, if appropriate. The survey will be undertaken as an enhanced Level 1 RCHM(E) type survey (details of LUAU's survey levels are contained in appendix 1). This means that GPS equipment will be used rather than total station survey methods. Site description will not be confined to a 50 word text field and will contain field details on character, condition, fragility, group value and accessibility as well as on location, extent and period.

3.2.2 Mapping

Because of the open and remote nature of much of the study area (particularly from carefully surveyed Ordnance Survey points), the sites will need to be located by instrument, and experience has demonstrated that the most cost-effective technique (in terms of accuracy and speed) is the use of a satellite Global Positioning System (GPS). This uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey national grid. In our experience the use of GPS techniques is an essential and extremely cost effective means of locating monuments and particularly in areas of woodland, where conventional techniques are prone to significant error. The GPS equipment that will be used is a Steanne/Navstar Midas post-processed differential GPS, which achieves accuracies of between +/- 0.5m and 2m. Unit staff have used this GPS equipment over the last 2 years on a large number of upland surveys.

When a previously unknown site is identified, a written description, including an accurate ten figure National Grid Reference, will be given and it will be mapped on to a 1:10,000 scale Ordnance Survey base at an accuracy of +/- 5 metres. The GPS recorded location will be accurate to a tolerance of +/- 1 metre. A photographic record will be undertaken simultaneously. Only sites greater than 50 metres in size will have their extents plotted, however where sites form components of wider clearly definable groups the extent of the group will be plotted. Hence individual monuments will be located but their extents not defined, but where they form part of a simple widely spaced group the individual features will be located and the extent of the cairnfield, for example, defined. Complex groups of features forming a discrete site, as for example an industrial complex or a dense cairnfield consisting of numerous closely packed cairns, will not be individually located, but recommendations for further more detailed levels of survey would be made.

The results will be translated into a CAD system to facilitate the generation of overlay plots. This dispenses with the manual production of drawings and considerably increases the efficiency of the preparation of completed overlays, as well as enhancing the flexibility of map output.

3.2.3 Description

Each site will be recorded on *pro-forma* sheets on which will be recorded details of location, extent, period, character, condition, fragility, group value, diversity, any potential threat and accessibility; each category will be given high, medium or low scores in the field. At the post-fieldwork stage a similar score will be placed on amenity potential. The monuments will be graded to assess their relative archaeological significance. Ten figure grid references, will be defined within the gazetteer of monuments as appropriate. Large monuments (over c 30m) will be defined by an eight figure central grid reference, however long linear features will be defined by ten figure grid references at each end.

The site description will provide for both an objective and subjective account of the sites and will justify the interpretation.

Buildings will be considered as archaeological remains, including domestic dwellings and agricultural structures, where they form part of wider sites, where they have a past specialist function of archaeological interest, or where they pre-date 1840 (the cut off point for more or less automatic listing).

Coniferous forestry with particularly dense undergrowth, low canopies and which have been ploughed during planting will be excluded from the present survey programme, because of the difficulty in identifying surface features, and because of the likelihood that monuments were destroyed during the plantation.

The gazetteer will be assimilated within a GIS compatible database format, typically using Microsoft Access software and the extents of monuments and monument groups will be defined within a CAD system as polygons to facilitate transfer into a GIS format.

3.3 Level 2 - detail topographic survey

3.3.1 Survey Levels

It is proposed to undertake different levels of survey, dependant upon the nature of the archaeological resource. The individual monuments (Castlesteads, Sub-rectilinear earthworks, Craggside Wood and former Lowther village) would be undertaken at a more detailed level (survey level 3: see LUAU levels-appendix 1) than the area of the former deer park, reflecting the lower level of complexity of features within the deer park. The latter would be surveyed at level 2a and would reflect the disparate nature of the feature and the extent of the survey area; and would enable significant cost savings in the recording process. Any archaeological monuments surveyed at level 2a or even level 3 can be upgraded to higher more detailed levels of survey by the provision of additional survey data.

The detailed survey level (3) would provide a detailed interpretive hachure survey and would show subtle earthwork detail, but would not incorporate contour detail; it would incorporate all archaeological features within the study area and also the appropriate topographic detail. The more basic survey (2a) will define in outline form the extent of all archaeological features and will utilise selective, hachure recording where appropriate. Topographic detail will be surveyed only where it is in the proximity of archaeological features and otherwise will use the OS base.

3.3.2 Survey Methods

The basic survey techniques will be the same for both levels of survey, the only difference being that a greater number and density of survey points will be captured for the level 3 recording and would involve more detailed site draughting.

Survey control will be established within the extent of each site by closed traverse, and internally will be accurate to +/- 15mm. The control network will be located with respect to the OS national grid using the GPS and will be tied to the OS National Grid to an accuracy of better than +/- 1.0m.

The archaeological and topographic detail will be surveyed by EDM tacheometry using a total station linked to a data logger. The accuracy of detail generation will be appropriate for a 1:200 output, although the final maps may be plotted up at lower scales as required. The digital data is transferred onto a portable computer for manipulation and transfer to other digital or hard mediums.

The archaeological detail is drawn up in the field as dimensioned drawings on site plots with respect to survey markers. The local topographic detail is also surveyed, particularly if it is archaeologically significant or is in the vicinity of archaeological features. Additional topographic detail outside the study area will be digitised from the OS 1:2,500 mapping to provide an overall context for the site.

The survey drawings will be generated within a CAD system and can be output at any scale. The survey would be plotted as wet ink drawings on stable polyester film sheets, using line thicknesses appropriate for reproduction and reduction. The CAD drawings will be configured within an appropriate layering scheme, which will enable differing representations of the survey data. The final digital output can be provided as a DXF file for incorporation into other industry standard CAD or GIS systems.

In conjunction with the archaeological survey, a simultaneous photographic record will be undertaken of significant archaeological and historical features. This will include close up photography of significant detail.

3.4 **The archive**

The results of the fieldwork will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*). 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. LUAU conforms to best practice in the preparation of project archives for long-term storage. The expense of preparing such an archive is part of the project cost, but only represents a very small proportion of the total. This archive will be provided in the English Heritage Central Archaeological Services format, both as a printed document and on 3.5" disks as ASCII files, if appropriate. A synopsis (normally the index to the archive and the report) should be placed in the Cumbria Sites and Monuments Record. It is normal LUAU practice to make a copy of the archive available for deposition with the National Archaeological Record in London. Three security copies of the archive will be made.

The archive will incorporate copies of the documentary material, including bibliographic, cartographic and photographic sources. It will include survey control information, and digital survey data. It will include a set of field and final ink drawings on film and the report and gazetteer on both hard and digital formats. The photographic archive for submission will include negatives, and colour transparencies. Project management records will be incorporated within the archive.

3.5 **Reporting**

A report summarising the results of the documentary and field surveys will be produced within nine weeks of the completion of that fieldwork. It will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the material within the broader context of regional and national archaeological priorities will be made. The potential for further archaeological fieldwork will be examined both in relation to individual sites and for the estate as a whole. The report will make a clear statement of the archaeological potential of individual sites within the estate and will highlight any sites under threat where, if their significance requires it, measures to safeguard their integrity should be implemented.

The report will provide a chronological account of the evolution of landscape as can be defined from the survey results and from cartographic analysis. It will define the park features as presently survive and where possible features will be assessed in terms of the landscape development of the park.

The full report will consist of an acknowledgements statement, lists of contents, executive summary, introduction summarising the brief and project design and any agreed departures from them, geomorphological and historical background, interpretative account of remains found, gazetteer of sites with grading of significance, assessment of potential (in accordance with *The Management of Archaeological Projects, 2nd edition, 1991*), list of archive contents and bibliography. Illustrative material will include location maps and plans, where appropriate.

Four bound copies of the full report will be submitted to the client, further copies will be submitted to the Lake District National Park Authority and English Heritage. Each report will be illustrated by a selection of black and white (7" x 5") prints and A3 drawings.

The report is designed as a document for the specific use of the Client, for the particular purpose as defined project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

4. **HEALTH AND SAFETY**

4.1 **Health and Safety**

LUAU will provide copies of their written Health and Safety Statement on request. Risk assessments are carried out in advance of all projects. All site procedures are undertaken in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991, revisions 1993) and the Health and Safety at Work Act 1974.

4.2 Insurance

The insurance in respect of claims for personal injury to or the death of any person under a contract of service with LUAU and arising in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of LUAU in respect of personal injury or damage to property by negligence of LUAU or any of its employees, there applies the insurance cover of £1m for any one occurrence or series of occurrences arising out of one event.

5. RESOURCES

5.1 Management

LUAU as a matter of course complies with the relevant code of practices of the Institute of Field Archaeologists. The project will be under the project management of **Jamie Quartermaine, BA Surv Dip, MIFA** (Project Manager) to whom all correspondence should be addressed. He will monitor the progress of the project ensuring adherence to all agreed programmes and timetables. He has many years experience of surveying upland landscapes, particularly in the Lake District and Yorkshire Dales National Parks.

5.2 Project staff

The survey would be under the direction of **Andrew Croft BA**, who has considerable experience of upland survey in the Lake District, having worked in this capacity for both LUAU and the National Trust.

6. TIMETABLE

6.1 Desk-based study

Three days would be spent evaluating local and national archives and producing a preliminary report.

6.2 Fieldwork 1995

Six days will be spent in the field undertaking the level 1 survey.

6.3 Level 2 survey

The complete programme would involve 13 days fieldwork.

6.4 Archiving and preliminary report

Four days will be spent analysing and archiving the results.

14 days will be spent generating the graphic record

Two and a half days will be spent by team members writing the report. The project manager will spend 0.5 days checking and editing the report.

APPENDIX 3

LUAU LEVELS OF SURVEY

This describes the types of survey appropriate for the various stages of archaeological evaluation undertaken in advance of development as practised by the Lancaster University Archaeological Unit. They are based on survey levels defined by the Royal Commission on the Historical Monuments of England (RCHM(E)) and are in accordance with stages of evaluation defined by the Association of County Archaeological Curators (ACAO 1993).

Level 1 Survey (Assessment)

This is a rapid level of survey (Site Inspection in project design) typically undertaken alongside a desk top study as part of the site assessment (ACAO 1993, 14). It is an initial site inspection which helps the local planning authority to consider fully the archaeological implications of a planning proposal and also serves as the basis for undertaking and planning further archaeological work on the site.

The Level 1 survey represents the minimum standard of record and is appropriate to exploratory survey aimed at the discovery of previously unrecorded sites. Its aim is to record the existence, location and extent of an archaeological site. The emphasis for the recording is on the written description which should record type and period and would not normally exceed *c.* 50 words.

The location and extent of the sites is typically shown on 1:2,500 or 1:10,000 OS maps as requested by the client. The extent of a site is only defined for sites greater than 50m in size and smaller sites are shown with a cross.

There are two alternative techniques (Levels 1a and 1b), which provide different accuracy levels and have different applications:

Level 1a

The sites are located by manual distance measurement techniques (eg pacing) with respect to field boundaries and provide an accuracy of +/- 10m (8 figure grid ref.). The loss of accuracy is offset by the slightly reduced costs, however, it is only appropriate for enclosed land, because of the paucity of usable topographic detail.

Level 1b

The sites are located using Global Positioning System (GPS) techniques, which uses electronic distance measurements along radio frequencies to satellites to enable a fix in Latitude and Longitude, which can be converted mathematically to Ordnance Survey National Grid. As long as differential GPS techniques are employed then it is possible to achieve accuracies of better than +/- 1m (10 figure grid ref.). There is a slightly increased cost implication by comparison with Level 1a survey, but it can be undertaken in most terrains, even some woodland.

Level 2 Survey (Evaluation)

Level 2 survey defines the extent of all surface archaeological features on site in relation to topographic elements (e.g. field walls) and accurately defines the extent of the overall archaeological site. It is produced in conjunction with a full objective and interpretative description of the features. The Level 2 survey defines an archaeological context for any trial excavations and shows the location of the trenches in relation to the surface features. This level is used to assess the archaeological significance of the site and serves as the basis, along with other evaluation techniques, for the submission of recommendations to the District or County Planning Officer.

There are two sub-divisions of evaluation survey (2a and 2b), which define different levels of detail and complexity. The appropriate application of these levels depends on the extent of the survey areas, the complexity of the archaeological features and the requirements of the survey product.

Level 2 survey methodology

The difference between the two sub-levels (2a and 2b) is primarily in the density of raw data and the detail of the field draughting; and the basic survey methodology is essentially the same. The surveys are undertaken using Total Station survey equipment and are located either using Global Positioning Survey (GPS)

techniques or by traverse with respect to Ordnance Survey control. The internal accuracy is typically $\pm 0.05\text{m}$ but is located with respect to the OS National Grid to an accuracy of $\pm 1.0\text{m}$ or better.

The survey methodology is designed to enable ease of up of the survey levels as required. All Level 2 survey methods rely upon a permanent survey control and the raw survey data is produced with sufficient accuracy to enable their re-use on more detailed drawings at higher scales than originally intended. Fundamental to this process is that all draughting is undertaken within a Computer Aided Draughting (CAD) environment, which retains the primary accuracy of the raw data and allows flexibility of enhancement. Upgrading from Level 2a to 2b will require the provision of additional raw survey data as well as the enhancement of field drawing, but the upgrading from Level 2b to 3 will only require drawing enhancement, in the field, with respect to the raw survey data.

Level 2a

This defines the most basic level of instrument survey and is appropriate for the recording of scattered, low complexity archaeological features, typically those found during an extensive open area survey. Archaeological features are defined in outline and earthworks are shown with only minimal hachure annotation. Topography is for the most part extracted from an OS base, although topographic detail in the vicinity of archaeological features is recorded by instrument survey. The raw survey data is typically captured with sufficient density to enable the mapping of the resource appropriate for a 1:500 or reduced scale output. A requirement to output at a greater scale, would involve the provision of additional survey data and enhanced recording. The record incorporates a basic level of textual description of individual features and an overall interpretative assessment of complete site groups.

Level 2b

This enhanced level of evaluation survey recording incorporates a relatively large quantity of raw survey data, which can define the extent and form of individual monuments in considerable detail. The detail of earthworks are defined in sufficient detail, to show the character and form of individual earthworks, but does not provide a full interpretative record. The local topography is recorded in greater detail, but also incorporates OS data where spatially remote from the archaeological features. The primary distinction between the Level 2b and Level 2c survey is in the intricacy of the detail draughting. The Level 2b recording is appropriate for an upgrade of a cairnfield survey, for example, but would be inappropriate for the recording of complex earthworks for which a Level 3 survey would be more appropriate. The level of detail would enable appropriate reproduction up to a scale of 1:250. An upgrade from a Level 2b to a Level 2c survey would not need additional instrument survey data, but would require extensive field enhancement of the CAD record. This basic level of survey would typically be undertaken alongside trial excavation work as part of an evaluation (ACAO 1993). It can serve as a mitigation measure for smaller sites with poor surface survival and should be applied where sites of limited significance are under threat.

Level 3 Survey (Detailed Recording)

This is the most detailed level of purely interpretative survey and is equivalent to the RCHM(E) Level 3 survey. It involves very detailed interpretative hachure draughting of surface features and is intended for output at scales of up to 1:50. Because of the intricacy of detailed draughting it is inappropriate for large scale generalised mapping but instead is typically applied to the recording of complex earthworks, which involve considerable spatial analysis. Textually the relationship between individual features is contextually assessed and provides for detailed, internal analysis of a complex site. This is undertaken in addition to the description and overall assessment appropriate for the Level 2a survey.

Surveys undertaken at Level 3 from the outset involve the use of similar basic instrument methodologies as the Level 2b survey, although the draughting is more detailed and analytical. However, if a Level 3 survey is produced by upgrading a level 2b survey, then it is typically possible to use manual field survey techniques to enable the graphic enhancement of the more basic survey. An upgraded Level 3 survey is generally depicted on separate layers from the original Level 2b survey to enable subsequent more generalised output at lower scales if required. The design of the Level 3 survey is designed to be enhanced by the provision of contour detail into a Level 4 surface modelled survey. Subject to the requirements of the ACAO, the Level 3 survey can serve as a mitigative record for intermediary graded monuments.

Level 4 Survey (Comprehensive Recording)

Level 4 survey is a comprehensive record of the archaeological features in relation to the surface topography. It incorporates an interpretative hachure survey alongside a full computer generated model of the ground surface enacted when a full survey is needed in conjunction with excavations or in cases where detailed survey of fragile upstanding earthworks is the only appropriate mitigative measure.

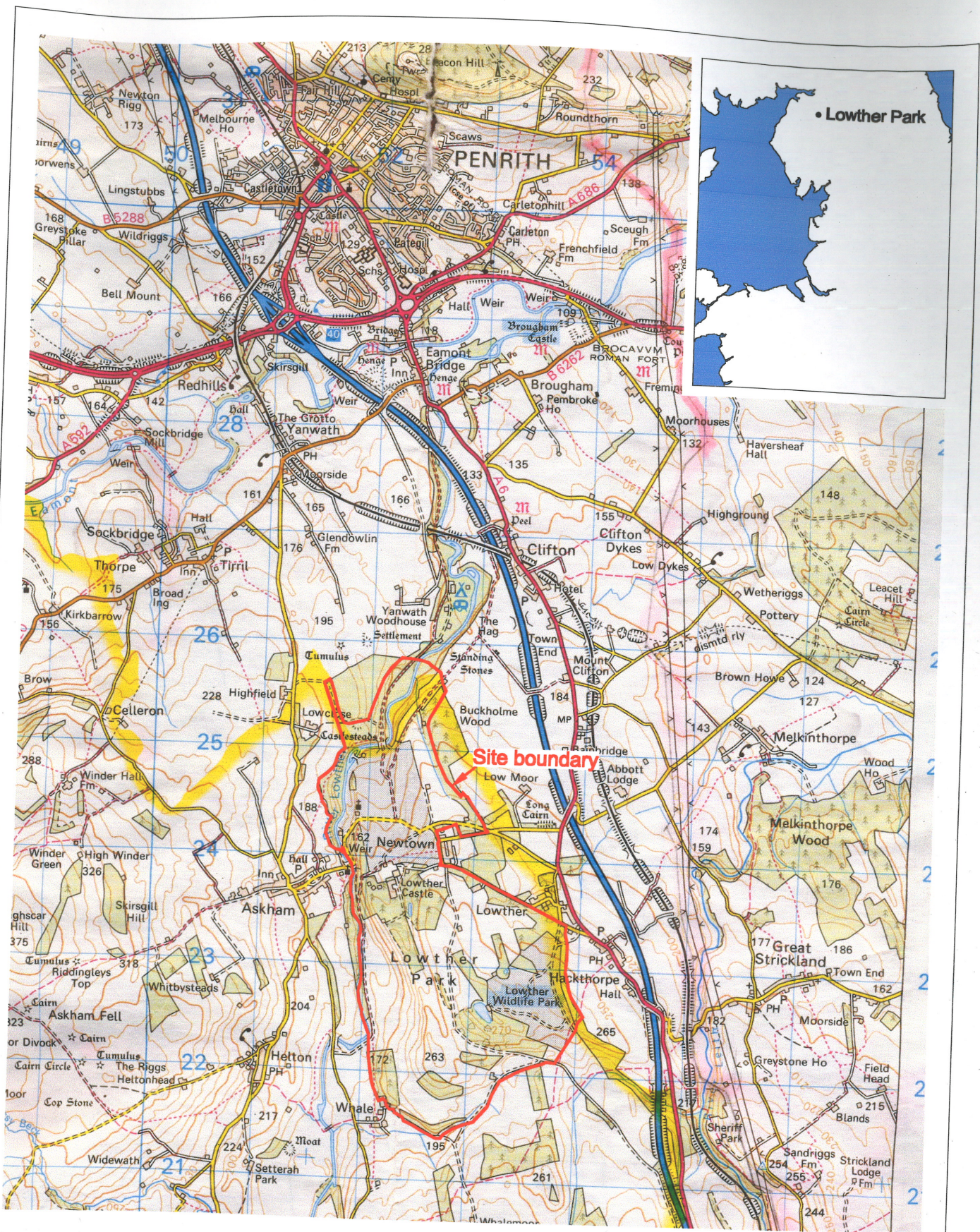
The Level 4 survey is designed to record the archaeological site as fully as current technology will allow and is the appropriate mitigation response where significant sites are threatened with destruction. It is applied selectively to sites of particular importance and which have a good survival of surface features.

It is generated by the provision of additional survey data to the Level 2 or 3 surveys and is of an equivalent level of accuracy ($\pm 0.05\text{m}$). In many cases only a relatively limited amount of additional data is required to upgrade the Level 2 survey to the full surface modelled Level 4 and therefore this can be an economic recording option.

The Level 4 survey output is generated on CAD which maintains the original accuracy of the survey data and allows flexibility of drawing output at any scale. The drawing file will record the contour detail at different height separations and the final survey drawings can therefore be tailored to meet any requirements of the client.

ILLUSTRATIONS

- Figure 1 Lowther Park Location Plan
- Figure 2 Lowther Medieval Settlement
- Figure 3 Greatholme Plantation Settlement
- Figure 4 Lowther Deer Park
- Figure 5 1732 map of Lowther Park (CROC D/LONS/L/PLANS)
- Figure 6 Development of the Lowther Park Boundary from 1683 - 1899



based upon the Ordnance Survey 1:50000
with the permission of the controller of HMSO
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0 500 1000
metres

Figure 1: Location Map

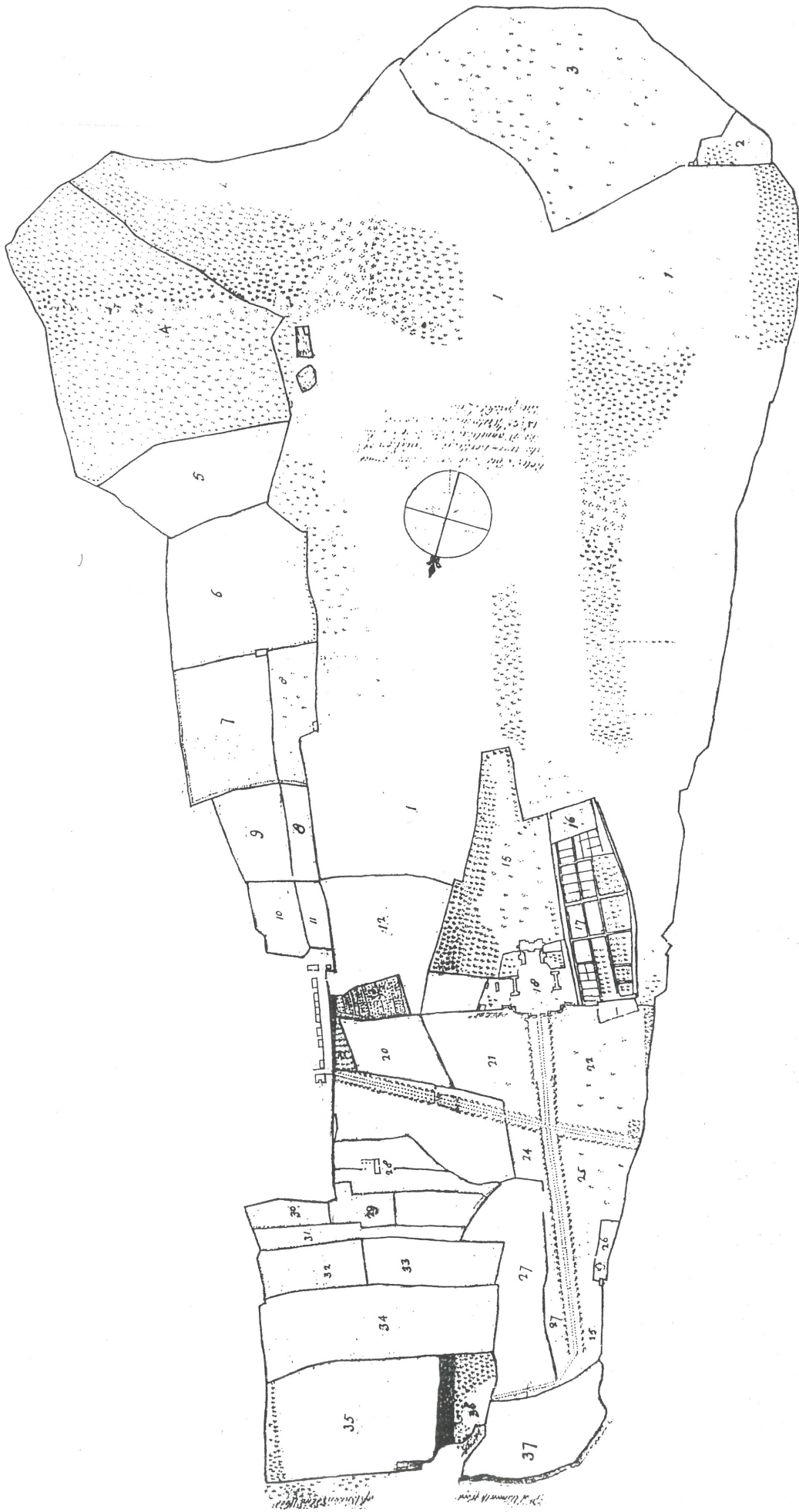
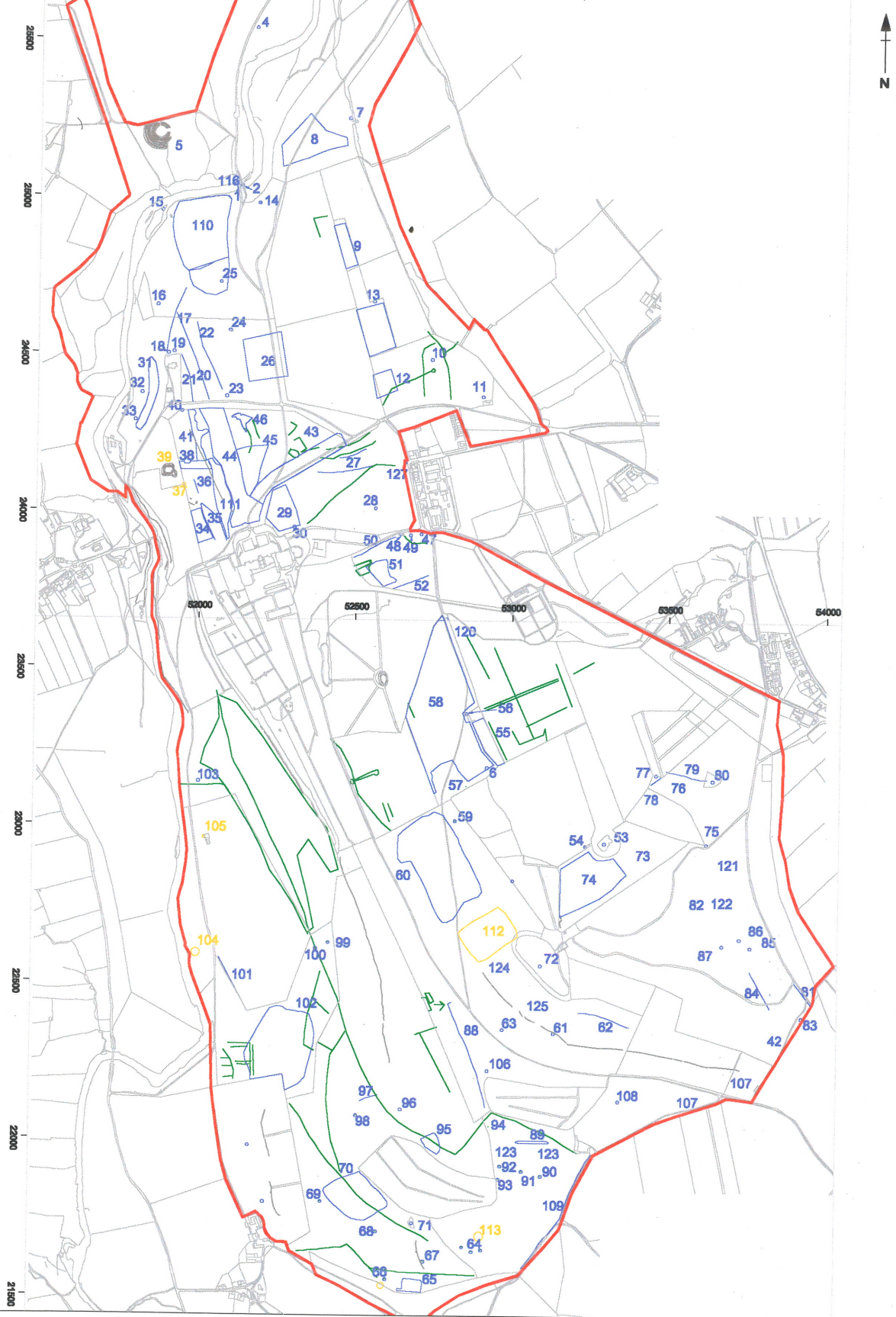


Fig.2 Lowther Park Survey 1732 (CRO D/Lons/L/Plans/1732)



KEY	
	Survey area boundary
	Identification Survey Sites
	SMR Sites
	Aerial Photographic Sites

Scale 1:12,500 at A4



Figure 2: Lowther park Study Area

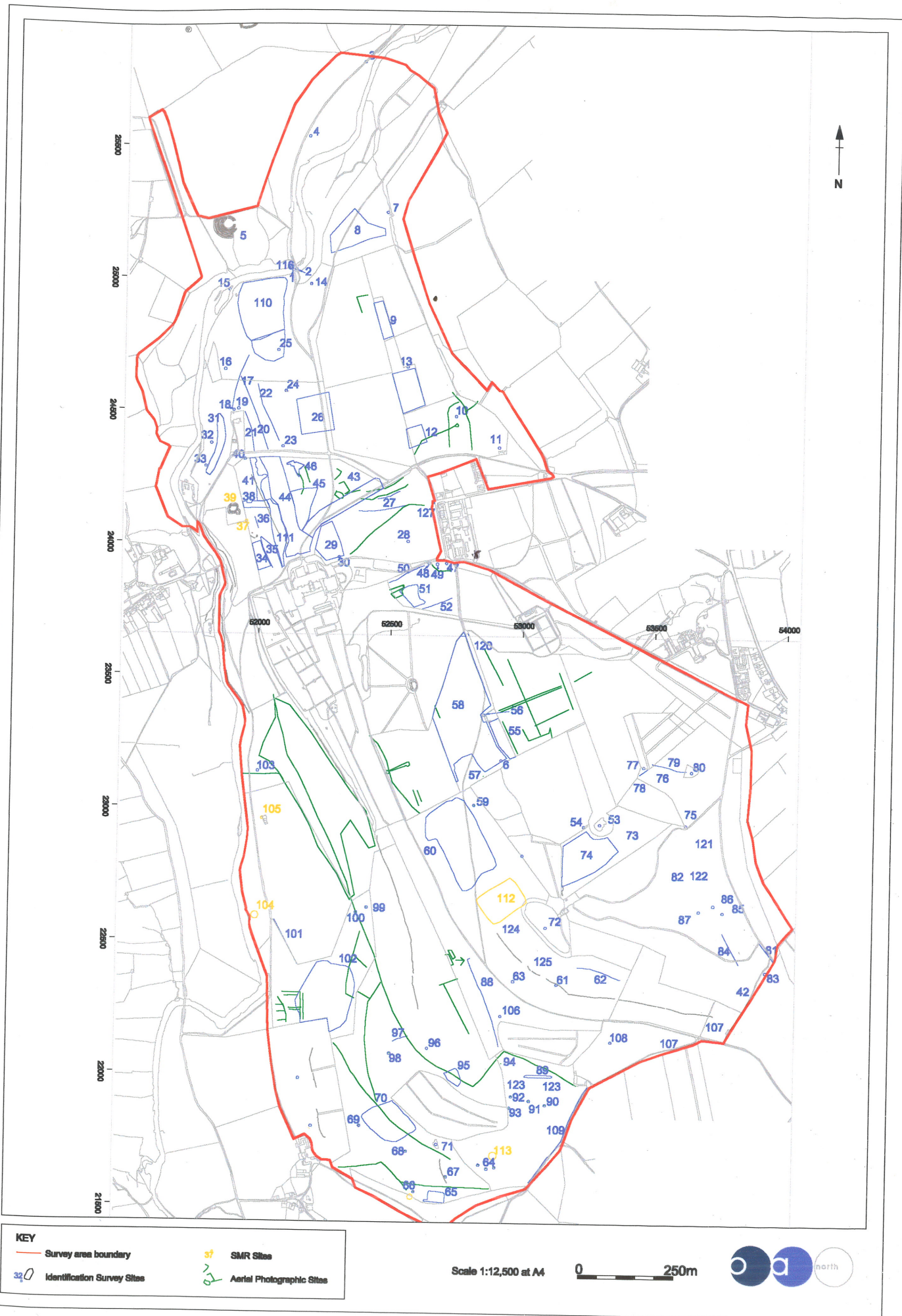


Figure 3: Lowther park Study Area

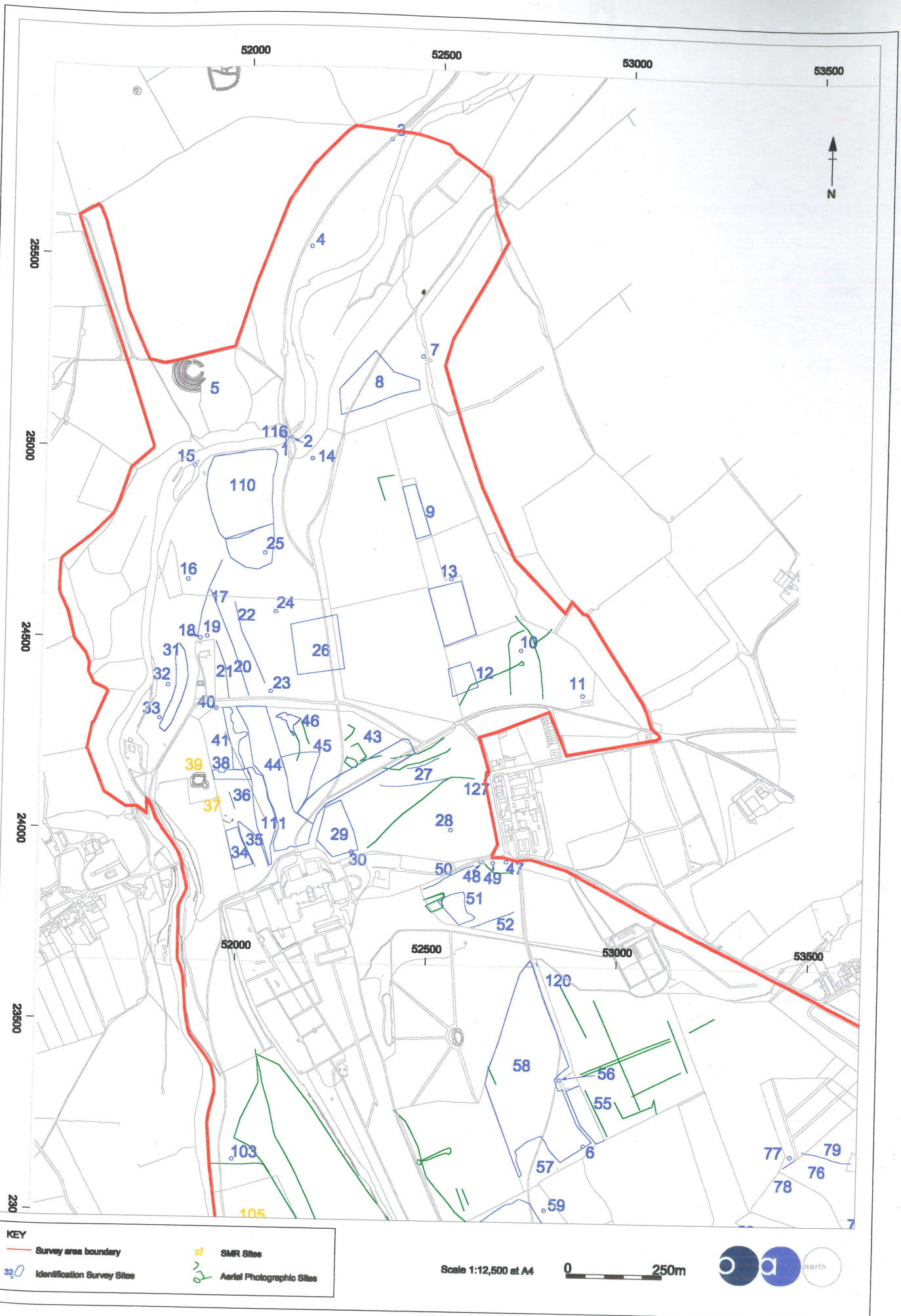
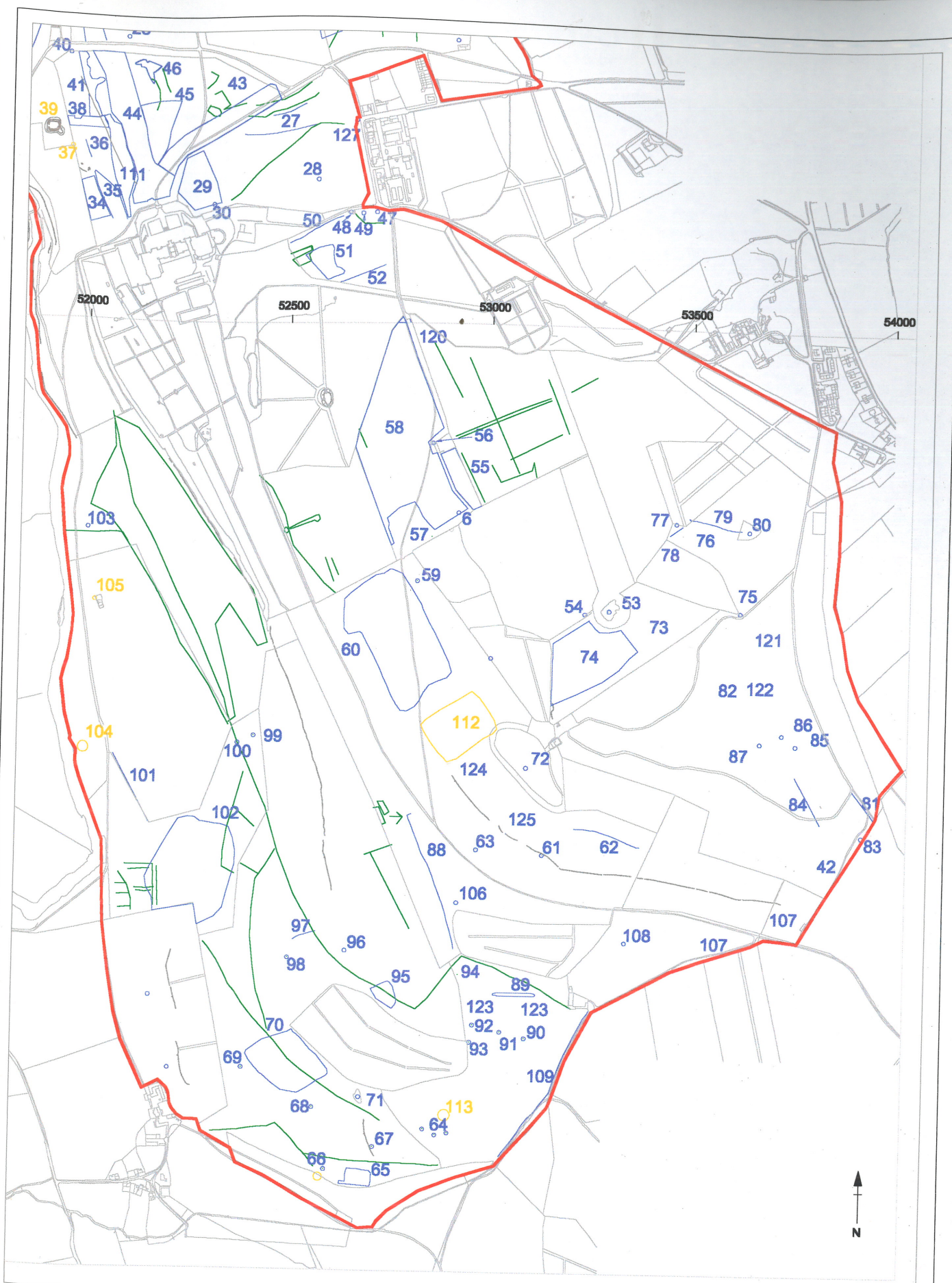


Figure 4: Northern Section



KEY	
	Survey area boundary
	SMR Sites
	Identification Survey Sites
	Aerial Photographic Sites

Scale 1:12,500 at A4



Figure 5: Southern Section

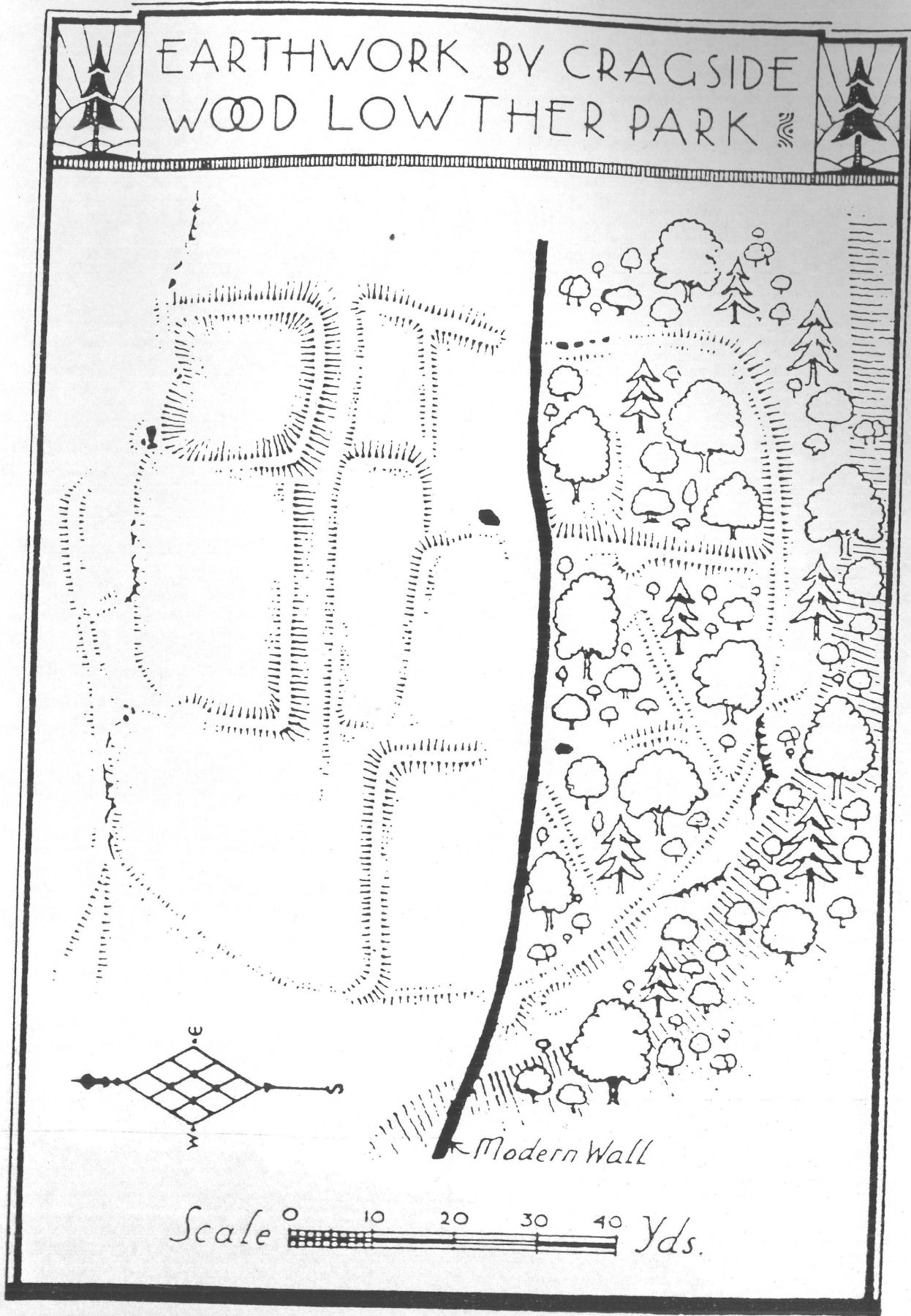


Fig.6 Cragside Wood Enclosure (Site 65)