



ASKHAM FELL

**HAWESWATER
PIPELINE**

Cumbria

Rapid Archaeological Assessment



Oxford Archaeology North

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United Utilities

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1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Oxford Archaeology North have been requested by United Utilities to examine the archaeological implications of two alternative pipeline routes (Option 1 and Option 2) which extend through the area of Moor Divock on Askham Fell, near Ullswater. Moor Divock is an extensive landscape containing a rich range of archaeological monuments extending from the Neolithic period through to the present, including a Neolithic stone circle, numerous Bronze Age funerary round cairns, ring and kerbed cairns, a stone avenue, a long section of extant Roman road, two Romano-British settlements, and a medieval (and possibly even early medieval) settlement. The area is a natural col between the Ullswater and Lowther Valleys, in the upland area of the Lake District, which has been used as a communication route for a considerable period, extending possibly back to the Neolithic period. The construction of the pipeline would have considerable impact on these landscapes of great known and potentially unknown archaeological sites. Since the sites are scheduled they are in theory protected from ground disturbance and are deemed of national importance.
- 1.1.2 **Rapid Assessment:** United Utilities have requested a statement outlining the archaeological potential of the two routes, rather than a detailed archaeological assessment. Consequently no new documentary work has been undertaken, and the following description of the archaeological resource is based entirely on the results of a detailed archaeological survey of Askham Fell undertaken by Lancaster University Archaeological Unit (now Oxford Archaeology North) in 1988; this was undertaken as part of the Lake District National Park Survey (LDNPS), a major survey of upland landscapes funded by English heritage. The survey results section of the present report and the accompanying maps are adapted from a forthcoming monograph publication presenting the results of the LDNPS programme (Quartermaine and Leech forthcoming). The impact and recommendations section examines the specific impact of the two alternative route options and makes recommendations for the programme.

2. BACKGROUND

2.1 TOPOGRAPHY AND GEOLOGY

- 2.1.1 Askham Fell is a gently sloping col between Heughscar and Loadpot hills, on a ridge dividing Ullswater and Lowther valleys. It forms a natural communication route between the two valleys and has been used as such since the prehistoric period (*cf* Site Group AF VII). The survey area encompasses slightly undulating, unenclosed moorland, which is edged to the north, west and east by enclosed land and to the south-west by an arbitrary line corresponding approximately to the 360m contour.
- 2.1.2 There are extensive mires and areas of poor drainage, mainly around the central, flat area of the col (near Pulpit Holes). These areas were generally avoided by archaeological monuments, which were mostly located on the slightly higher, better drained ground. There is only evidence of a limited change to the drainage pattern in localised areas; notably, the small mire in cairnfield group AF Ic, which encompasses parts of banks AF 35, 37 and 38, and may have expanded since the construction of the cairnfield.
- 2.1.3 The base rock in the region is limestone and consequently the area is pock-marked with sink-holes. The main concentrations of these are in the central, flatter parts of the col (Pulpit Holes and Wofa Holes), but there are other occasional, scattered sink holes throughout the area. Some were either formed or have expanded within the relatively recent past; bank AF 213 (near Heughscar) is on the edge of a line of sink holes and has partly collapsed into them, probably as a result of the expansion of one of the sink holes. A small sink hole was identified in the middle of stone avenue AF 121, with orthostats close to its edge on either side. An adjacent sink hole has a grouse butt collapsing into it. Both sink holes appear to have formed or expanded since the construction of the monuments.
- 2.1.4 On the higher parts of the fell, mainly around Heughscar Hill, limestone pavement is exposed in patches with only thin turf cover over more extensive, adjacent areas. The land is of limited agricultural quality, but it was able to support two early, although not contemporary, farmsteads (AF 203 and 206). Both contain areas of pavement within their outer banks, but that of AF 203 is slightly below the external ground level and has probably been exposed as a result of grazing or similar erosive forces since the construction of the farmstead. It has been demonstrated that in some areas, notably around Malham Tarn, that sheep grazing can lead to a reduction in turf cover over the pavement (Sweeting 1974, 56-9), hence the land quality around the farmsteads may have been better in antiquity than at present.

2.2 HISTORY OF INVESTIGATION

- 2.2.1 The earliest recorded antiquarian activity on Moor Divock, which is a part of the wider Askham Fell, was an excavation of round cairn AF 130 by Canon Simpson in about 1861, during which an adult inhumation was found in a slightly off-centre cist (Taylor 1886, 335-6). Possibly at about the same time, Canon Simpson

also excavated round cairn AF 119, in which he found a cremation within an inverted urn (Simpson 1883; Taylor 1870, 165).

- 2.2.2 The earliest mapping of the Moor Divock monuments was on the 1st edition 6 in Ordnance Survey map of 1865 which showed the most prominent monuments: High Street (AF 1), The Cockpit (AF 86), The Copstone (AF 115) and the tumuli of group AF VII.
- 2.2.3 The following year, in 1866, W Greenwell and W Taylor excavated within cairn circle AF 117 (Greenwell 1877, 400-1). They found the cremation of an adult in association with a 'food vessel'. Taylor (1886, plates I-IV) produced individual plans of sites: AF 86, 115, 117, 119, 122 and 130. He also recorded the stone avenue AF 121, but in a more continuous form than was observed during the present survey. There was no depiction of the sink hole which is presently in line with the stone avenue.
- 2.2.4 In 1933, after a *c*50 year hiatus, J Spence initiated a new wave of interest in Askham Fell landscapes, undertaking a basic survey of the Threepow Raise cairnfield (AF II) (Spence 1934). The following year he reported on the excavation of three cairns from the same cairnfield (Spence 1935a). Unfortunately he did not attempt to locate these cairns and their descriptions do not precisely correlate with any of the disturbed cairns recorded by the present survey. No burials were found and the description of his second cairn, in particular, appears to indicate a clearance function.
- 2.2.5 In the same year Spence undertook a basic survey of the 'Romano-British' and 'medieval' settlements (AF 203 and 206) on Skirsgill Hill (Spence, 1935b). Two years later the Royal Commission on Historical Monuments published a more detailed plan of the AF 203 enclosed settlement (RCHM(E) 1936, 21-8).
- 2.2.6 Between 1937 and 1943, T Hay identified a second crossing point of the High Street (AF 5) over Elder Beck, in addition to that marked on the OS maps near The Cockpit (Hay 1938 and 1943; Collingwood 1937).

3. SURVEY RESULTS

3.1 INTRODUCTION

3.1.1 The survey was undertaken in May 1988 on 5.5 km² of unenclosed moorland. A total of 221 monuments were found in 12 site groups. There are about 36 small, round cairns scattered across the moor which are not incorporated into groups or cairnfields and display no relationship to any other monuments. They have not been described in the following site group reports, but are fully described in the archive.

3.1.2 In addition to the numbered sites, there were also some late post-medieval/industrial period monuments which were found scattered across the moor, often in proximity to the site groups. However, they are described here, separately from the main site groups, as they were clearly not related to them.

3.1.3 **Grouse butts:** in the course of the survey, 27 grouse butts were recorded on Askham Fell. Apart from one butt in the Wofa Holes area, all were arranged in lines. There were four lines of butts radiating south-east, north, south-west and west from a well built, central butt (marked C on plan 8) near the junction of two tracks. To the south-west of the main fell track is a further line of six butts facing south-west into the area of the Wofa holes. They are often varied in form; some are simple curved banks with only limited evidence of internal revetting, whereas others have complete circular plans with well constructed entrances. They are all on the south-eastern side of the parish boundary, which presently serves as the boundary between two estate land owners.

3.1.4 **Lime kilns:** there are two lime kilns and associated quarries within the survey area, and another just outside at NY 4829 2354:

- Kiln AF 147 is on the western slope of Askham Fell and is linked via a charging ramp to the main Pooley Bridge/Helton track. It is built into a terrace and comprised a partly decayed, rectilinear, dry-stone structure set into a moderate slope. The single bottom aperture is arched and in good condition (1.1m high). The top charging aperture is blocked and its precise width is unknown.
- Kiln AF 181 is on relatively gently sloping ground and is partly set into a large irregular, artificial mound on top of a relatively low natural rise. It is a rectilinear, masonry draw kiln with a single firing chamber standing to a height of 4.65 m. It has an arched, base aperture 1.85m high with a 3.5m wide top aperture. The lime output was transported via 20m of sunken way to a track that led onto the Helton road.

3.1.5 These are typical examples of the draw kiln which first appeared during the eighteenth century and was produced in large numbers during the eighteenth and nineteenth centuries (Trueman 1989, 8-11). The earlier of the two kilns was probably AF 147, because although both were marked on the 1st edition OS map of 1865, AF 147 was described as 'Old Limekiln' and had presumably fallen out of use by that date.

- 3.1.6 **Quarrying:** there are extensive areas of open cast quarrying across the moor which were not related to the lime kilns. They are linear in shape and are found on a broad line that extends from the west side of Heughscar Hill (NY 484 234) via the Hag Stones area to south of the Riggs (NY 499 218) and appear to be following a mineral vein. Only small sections of quarry (near Hag Stones) are shown on the 1865 map, implying that most of the extraction took place after that date.
- 3.2 **ASKHAM FELL I (HIGH STREET) - Monuments AF 1-38, 100 and 219**
- 3.2.1 The site group is on gently sloping ground on the edge of the Ullswater valley. It is generally well drained, but there are occasional, localised patches of mire scattered throughout the area. It comprises two diverse elements; a section of Roman road with associated banks (A), and a small cairnfield (B).
- 3.2.2 **Sub-group A (AF 1-18, 100) - Roman road:** the main element of the sub-group is a 1180m long section of the High Street Roman road (AF 1 and 5). Beyond the visible south-western end of the road is an area of thick peat, and no continuation was observed despite extensive ground reconnaissance. At the north-eastern end of the section it appears to merge with a modern track which probably defines the continuing line of the Roman road. The surviving section of road is not entirely continuous and its form varies throughout its length. The best preserved section, between NY 4764 2219 and 4792 2224, comprises a well defined, fairly regular, flat topped *agger*. It has an irregular, discontinuous ditch only on the south-eastern (up-slope) side which cuts through the *agger* in two places to allow for drainage. The *agger* is on average about 4m wide and is up to 0.5m above the bottom of the ditch. By contrast, at the south-western end (between NY 4738 2176 and 4755 2192) the road comprises just two parallel ditches between 7m and 9.5m apart with no evidence of an *agger*.
- 3.2.3 As the road converges with the gully of Elder Beck it has become increasingly damaged as a result of water erosion; the ditches increase in size and the *agger* becomes a round profiled, central bank which eventually disappears completely into a large water-worn gully, at the bottom of which is a localised area of mire. It would appear that the road and ditches have affected the drainage pattern of the area on the western side of Elder Beck, and the gully and localised mire may have been formed since the road was constructed.
- 3.2.4 At NY 481742 2350 is a possible ford crossing of Elder Beck (Hay 1943) extending away from it, diagonally up the eastern side of the beck gully, is a narrow, ill defined, possible track, partly sunken into the slope. Continuing on from the beck section the road takes the form of a low bank with a slight ditch on the up-slope side.
- 3.2.5 **Related Banks:** there are a series of banks which were either orientated parallel to the road or terminated at the road but, though they clearly relate to it, they may post-date its construction. Stone bank AF 2 is a 430m long, discontinuous and irregularly defined stone-bank which is orientated approximately parallel to the Roman road. It apparently merges into bank AF 3, but because of the poor definition of AF 2 at this point it is not possible to determine their phase relationship. Banks AF 3 and 4 are similar in form, they display large amounts of

stone material, are of similar width and prominence and were probably component parts of a single feature. AF 4 displays evidence of kerbing and may have been a wall. Part of AF 4 overlies the Roman road and clearly post-dates its use as a road.

- 3.2.6 Extending down-slope from the road are a series of parallel, discontinuous, irregular stone banks (AF 7-10). They are similar in form and were possibly a result of the erratic dumping of clearance stone along lines of field boundaries. Banks AF 8 and 10 butt against the Roman road and therefore post-date its construction. In between banks AF 7 and 8 there is an ill defined, low, circular bank which has slight internal terracing (AF 14) and an entrance on its south-western side. It would appear to be a hut-circle, but it is too indistinct for a reliable interpretation.
- 3.2.7 **Sub-group B (AF 19-38):** the cairnfield comprises small, generally ill defined cairns which display no significant alignments and have an essentially random distribution. At the northern end of the group are two stone banks that are perpendicular to each other (AF 35 and 37), but separated by a localised, dense mire which obscures any possible join. Bank AF 37 is approximately parallel to banks AF 8 and 10 and is orientated towards the end of bank AF 3, hence may be related to the AF IA field boundaries. Stone bank AF 35 has a slight lynchet-like profile which may be indicative of soil slippage in the area to the north.
- 3.2.8 **Askham Fell I discussion:** the line of the Roman road (AF 1), described above, differs by up to 80m from the line of the road first marked on the 1st edition OS map (1867) and which appears to have been copied onto all subsequent OS maps. Despite careful reconnaissance, no sign of a road was observed along the OS line. Hay (1943) also reported difficulty in identifying the road but suggested that there was evidence of 'foundation work' in the area of the AF IB cairnfield. Although the OS line of the road may be a fictional representation based on earlier, less accurate mapping, it is also possible that there was a second line of the road that took advantage of a higher and easier crossing of Elder Beck (near The Cockpit), but which has subsequently become obscured by peat and vegetation cover.
- 3.2.9 The related banks (AF 2-10) appear to define boundaries of a crude field system which were laid perpendicular to the Roman road and either cross over or butt it and clearly post-date its construction. As the Roman road was used as the framework of the field system, it must have been a fairly dominant feature of the landscape at the time of the field construction and may even have been in partial use. If there was a second, higher line of Roman road, it never served as a base line for later field boundaries and must have been a transient feature.
- 3.3 ASKHAM FELL II (THREEPOW RAISE):** Monuments AF 39-77 and 80
- 3.3.1 This cairnfield is on undulating ground and some of the cairns at the northern end are on the moderate sloped sides of a small gully. The ground is generally well drained, but there are mires in the vicinity. The component cairns are generally fairly small and those to the north are often ill defined. An alignment of five cairns and banks (AF 45 and 47) runs along the top of a low rise, but otherwise the cairn distribution appears to be determined by the local topography. In addition to the smaller cairns, there is a limited number of larger and more

prominent cairns. The large cairn AF 48 is on the highest part of Threepow Raise (7.1 x 6.2 x 0.55m). It is well defined with a prominent, rounded profile and some large stones around the south-western edge which appear to be the remains of a kerb. An excavation cut into its eastern side has exposed a long flat, upright stone which may have been the side of a cist. This putative cist is off to one side and may have been a satellite burial.

- 3.3.2 On the western side of the cairnfield are two fairly isolated but large cairns (AF 42 and 41). Cairn AF 41 is located on a slight rise in between two areas of mire and is large, prominent and has a slight dumb-bell like shape (12.2 x 4.4 x 0.35m). There are large upright stones along the south-west edge which appear to be elements of a kerb. Cairn AF 42 is similarly large, prominent and well defined (5.3 x 4.7 x 0.5 m).
- 3.3.3 The large, crescent-shaped bank AF 76 is remote from the cairnfield and was not necessarily a related feature. It has large amounts of stone and may have been a semi-circular wall. A small field has been built from the decayed structure at its northern end.
- 3.3.4 To the south-east of the cairnfield is a remote ring feature on a broad, flat area of well drained ground. It comprises a low, uniform, circular stone bank with a large gap in the northern quadrant. The internal ground is similar to that outside (19.5 x 1.5 (width of bank) x 0.2 m). Its function is slightly unclear, but it does bear some similarities with the basic stone ring form of ring cairn (Lynch 1972, 61-4).
- 3.3.5 **Askham Fell II discussion:** for the most part, the cairns are consistent with a stone clearance function, and this appears to be confirmed by the excavation of a 3m diameter cairn (Spence 1935a, tumulus 2) which revealed a simple pile of large boulders on and partly within a natural sub-soil. Unfortunately Spence did not precisely describe the location of the cairn within the cairnfield and it is not possible to relate it to any of the cairns recorded by the present survey. Fortunately the dimensions of the two other cairns that he excavated do correlate with the survey data. The third 'tumulus' corresponds to AF 51, and its excavation revealed a pile of boulders on a sub-soil containing pockets of charcoal, which were interpreted as the 'remains of brushwood'. Although the excavator believed this to have been a funerary monument the description is more consistent with the construction of a clearance-type mound on top of burnt and cleared scrub land.
- 3.3.6 The first 'tumulus' (cairn AF 50) represents a possible contrast; it is on the gentle summit of Threepow Raise and its excavation revealed two adjacent flat boulders, one upright, the other flat. The excavation was not able to establish if this was a cist; however, the adjacent large cairn (AF 48) has evidence for a kerb and has also been the subject of antiquarian activity revealing the side upright of a possible cist. It would appear that the Threepow Raise cairnfield (AF II) comprises two distinct elements; small clearance-type cairns around the lower slopes and a small number of funerary cairns on the gently sloping tops.

3.4 ASKHAM FELL III (THE COCKPIT): Monuments AF 86-93

- 3.4.1 The monument group comprises the stone circle known as The Cockpit and some associated cairns in a well drained, gentle sloping area close to a natural ford crossing of Elder Beck.
- 3.4.2 The stone circle comprises an annular, stone bank with 27 large, standing and recumbent stones set for the most part into the internal face of the bank (31.5-32.8m average diameter). The width of the bank is not uniform and it is particularly broad around the north-eastern side. The highest stone is about 0.95m high, although some of the recumbent stones are over 1.9m in length. Some stones may have been removed as there is a notable gap around the north-north-western side. Taylor reported a cairn incorporated into the north-western edge, but this seems to correspond to a line of five recumbent stones and would appear to be a result of collapse rather than a deliberate feature (Taylor 1886, 337-8). Another cairn reported by Taylor around the north-eastern side appears to correspond to a slight mound that was recorded by the present survey.
- 3.4.3 On the south-eastern side is a rectangular shaped alignment of stones butting onto the inside of the bank (c5m x 5 m). This is in an intrusive area of rushes and is ill defined. There are only limited amounts of stone in association, but it appears to mark out an area distinct from the rest of the stone circle which is similar in form and size to the rectangular enclosure within Castlerigg (Waterhouse 1985, 95-8). Apart from this feature, the internal area is flat and at a similar level to the ground outside.
- 3.4.4 Beyond the southern perimeter of the stone circle there is an arc of five orthostats (between 1.2m and 0.4m in height) which have radii from the centre of the stone circle ranging from 38.5-45 m. On the opposite side of the stone circle is an arc of four small cairns (AF 87-90) which have radii from the centre of the stone circle of between 35m and 51 m.
- 3.4.5 ***Askham Fell III discussion:*** Burl's analysis of chronological traits in Cumbrian stone circles suggests that The Cockpit was a later, rather than an earlier circle (Burl 1976, 59-61). This is possibly on the basis of lower quality mapping. However, the present survey appears to show a significant number of his early traits; its diameter is greater than 27 m, it has more than 20 stones, it has a flattened shape, and some of the now recumbent stones are over 1m high. Whether the five orthostats to the south of the main circle are parts of a concentric circle or are outlying stones is open to debate.
- 3.5 ASKHAM FELL IV: Monuments AF 94-99 and 148**
- 3.5.1 A very small group of cairns and a bank on the moderately well drained slopes between Elder Beck and the main fell track. There is an alignment of four small cairns (AF 96-99) orientated towards cairn AF 148 on a line, parallel to the track. There are no other cairns in association with the four and their alignment possibly reflects stone clearance along a former boundary.
- 3.6 ASKHAM FELL V: Monuments AF 101-107 and 138-143**

- 3.6.1 A group of banks and cairns on well drained, uniform moderate slopes to the north of the main Pooley Bridge/Helton track. They divide into two apparently unrelated sub-groups (A and B).
- 3.6.2 **Sub-group A (AF 103-107):** the most dominant feature of the sub-group is a large, slightly prominent round cairn (10.6 x 9.5 x 0.3 m). It has a regular, well defined edge but an irregular profile as a result of extensive robbing. A small mound to the west was probably spoil from this excavation. It is a large, regular shaped round cairn and is approximately in line with the AF VII alignment of prehistoric funerary monuments, there is therefore a likelihood that it was another funerary cairn.
- 3.6.3 To the north of and parallel with the track are a series of low-lying, ill defined, parallel banks. Although they are associated with brash deposits, there is a possibility that they were lines of cleared stone, superimposed with natural deposits.
- 3.6.4 **Sub-group B (AF 138-143):** the main features of the sub-group are two parallel stone banks (AF 140 and 143), which are c200m apart. Both are ill defined, discontinuous, irregular and display no evidence of dry-stone construction; they appear to be a product of stone clearance deposited along boundary lines. Their common orientation is diagonally across the slope and was not apparently dictated by the local topography. They were probably related and may mark the edges of a 200m wide field. There is some very faint ridge and furrow in the area which partly crosses the northern end of bank AF 140. Bank AF 140 is aligned with the most northerly section of the Roman road (AF 5) and although the precise course of the road through the AF V area is not known there remains the possibility that the orientation of the bank was determined by the line of the earlier road. Bank AF 139 is a large, prominent, linear bank with a ditch along the up-slope side. It cuts bank AF 140 and is itself crossed by some ridge and furrow near the southern end.
- 3.7 ASKHAM FELL VI, Monuments AF 113-114**
- 3.7.1 These are two prominent linear earthworks in a good condition which delimit a substantial area of unimproved land; however they have very different forms and were not necessarily contemporary. Bank AF 113 is a long, fairly uniform, prominent stone bank and is possibly a decayed dry-stone wall. AF 114, by contrast, is a well defined, very deep ditch bounded by banks on both sides. It was not intended as a drainage ditch as it runs over the top of a low rise and has no feeder or outlet drains.
- 3.7.2 Bank AF 113 is orientated approximately parallel to the Helton/Scales road. Ditch AF 114 comprises two lengths perpendicular to each other; one is parallel to bank AF 113 the other appears to cut it. Although bank 113, and probably also AF 114, appear to have served as boundary markers, neither relate to the adjacent, modern field walls. Ditch AF 113 is cut by a narrow section of the nineteenth century quarrying and, though they were clearly not modern features, the particularly uneroded condition of the earthworks would suggest that they were not of great antiquity.

- 3.8 ASKHAM FELL VII, Monuments: AF 115-137, 174-178**
- 3.8.1 This main element of the site group is a line of large, prehistoric, funerary monuments which runs approximately parallel to the modern track between Lowther and Ullswater valleys.
- 3.8.2 **AF 115:** at the southern end of the line is The Copstone, a large orthostat set into the south-eastern side of an irregular, discontinuous, low-lying, ring bank. The orthostat is c1.7m high and unworked. It leans over to one side but is very stable, indicating that a considerable proportion of the stone is beneath ground. The bank has an approximately circular shape, is very narrow and includes only four medium sized stones protruding from the turf. Taylor reported that there used to be ten recumbent stones around the bank (Taylor 1886, 326-7).
- 3.8.3 The internal area is approximately level but is pock-marked and generally uneven. There are some irregular depressions around the bank and in the circle which are not shown on Taylor's plan and probably represent antiquarian disturbance.
- 3.8.4 **AF 116:** in line with The Copstone (AF 115) and stone circle AF 117 is a 37m length of bank (AF 116). It is orientated directly towards the stone circle but only approximately towards the more distant The Copstone. It is slightly prominent, uniform in width, and kerbed. It would appear to be a decayed wall.
- 3.8.5 In line with wall AF 116 and stone circle AF 117, a short distance from the stone circle, is a rectangular configuration of four upright stones. These were first identified by Taylor as being part of a stone avenue (Taylor 1886, 330-2).
- 3.8.6 **AF 117:** an impressive, compact cairn circle (Lynch 1972, 62-3) comprising ten large, closely spaced orthostats around the edge of a round cairn (diameter of stone ring: 6 m, diameter of cairn: 10 m). There is no evidence of an entrance. In the centre is a substantial depression which is not shown in Taylor's illustration (1886, plate v) that would appear to have been drawn prior to the excavation by Greenwell in 1866 and was probably a product of that excavation. The excavation produced a food vessel within a layer of sand, beneath which were the remains of a cremated adult.
- 3.8.7 **AF 119:** a very large, very prominent, slightly oval-shaped round cairn on top of a gentle rise (17 x 15 x 1.4 m). Near the western end is a line of three very large orthostats orientated north/south. The central stone has an approximately rectangular profile and may have been crudely worked. The surface of the cairn is pock-marked with three large, irregular depressions and other smaller undulations laying testament to extensive antiquarian disturbance. One exploration by Canon Simpson, opposite the largest orthostat, revealed a cremation within an inverted urn (Simpson 1883).
- 3.8.9 Extending west-north-west from the cairn is an ill defined spur which is orientated towards stone avenue AF 121 and round cairn AF 130. On the north-eastern side are two further, but smaller protuberances.
- 3.8.10 **AF 121 ('stone avenue')**: this comprises two approximately parallel alignments of stones on a line between round cairns AF 117 and 130 (length of 'avenue': c122m, maximum height of stones: 0.45m). In the northern line there are 15

irregularly spaced stones and, in the southern line, there are seven stones. Many stones are clearly orthostats, but others have no obvious longitudinal axis, and are not necessarily upright. The line of northern stones appears to be interrupted by a sink hole which may have formed or expanded since the construction of the stone alignments. To the west of the sink hole are further stones and though these are larger than their eastern counterparts, they are not as well aligned.

- 3.8.11 The number of extant stones is fewer than previously recorded (Taylor 1986). In particular, no stones were observed between cairn AF 119 and cairn circle AF 117, although this could reflect vegetation excess rather than actual destruction. The small size of the stones, the extensive bracken cover in the area and possibly some limited disturbance has resulted in the existence of the avenue being questioned by the RCHM(E) survey (1936), and it has also subsequently been reported as no longer existing by both Waterhouse (1985, 117) and Burl (1993, 47). It is indeed fortunate that the rumours of its death have been greatly exaggerated for it provides significant evidence of the interrelationship of these otherwise diverse funerary monuments.
- 3.8.12 **AF 130 (White Raise Cairn):** an approximately circular, very large and very prominent cairn with a series of three stone banks extending tangentially from the body of the cairn (size excluding banks: 22 x 17.9 x c1.8 m). The matrix of the cairn comprises stones of all sizes with only a very small soil component. Its upper surface has been severely disfigured by antiquarian disturbance; there are small hollows and mounds of spoil across the whole surface of the cairn and it is difficult to discriminate original features from the later disturbance. Slightly south-west of centre is an open and empty cist (1.25 x 0.6 x 0.4 (below ground level) m) with an adjacent limestone capping slab no longer *in situ*. There were also substantial mounds of spoil around the cist. It was exposed by Simpson and contained a crouched inhumation (Simpson 1883). The cist from cairn AF 130 was larger than known cremation cists from south-west Scotland (Craigbirnoch: 0.55m x 0.36 m; Stairhaven: 0.5m x 0.35 m; Yates 1984a, 24-5), but was a typical size for an inhumation cists from that region (average 1.14m x 0.66 m).
- 3.8.13 The largest of the tangential banks is orientated south-west. It is large, moderately prominent and has some larger stones along the edge which may be an indication of dry-stone construction. A second bank extends north-north-west tangentially along the edge of the cairn but does not actually separate from the cairn. The third bank extends towards the north-west continuing the AF VII line of funerary monuments. It is slightly prominent, but is much less well defined than the south-west bank. There are significant amounts of turf cover over the banks, they are well decayed and do not appear to be of recent antiquity. However, the vegetation obscures the joins with the cairn and the precise relationship is not discernible.
- 3.8.14 **Other monuments:** included within the group are some widely scattered small cairns (AF 124-129 and 131-136) which bear no relationship to the alignment of funerary monuments. Monument AF 133 is a stock shelter comprising three walls radiating outwards from a central point. It provides shelter from winds of all directions. It is a post-medieval type of shelter, examples of which are commonly found on Cumbrian Fells. Decayed walls AF 123 and 124 may have been a similar type of shelter and the south-western end of wall AF 124 was possibly robbed in order to construct a small bield on its north side. However, it is

orientated towards a 120° bend in wall AF 123 and, if joined, the combined monument would have had a three armed, radial form.

3.8.15 **Askham Fell VII discussion:** Although there are natural rises or hillocks in the vicinity of these funerary monuments, they were not used, instead the cairns were located along a very deliberate line which is parallel to the present track. In addition, there are a series of linear features which are not only on the line but are orientated along it; wall AF 116, the spur/bank extending from AF 119, stone avenue AF 121, and the north-west bank from AF 130. These funerary monuments were clearly related by the alignment and were probably contemporary. Round cairns (eg AF 119 and 130) in northern England typically date to the early Bronze Age (Yates 1984a, 2-4) and the presence of a food vessel within cairn AF 117 would suggest that the 'cairn circle' also dated from the Bronze Age.

3.8.16 This alignment exceeds the normal laws of coincidence and there is a probability that the features were linked by a prehistoric route way which in part utilised the natural communication route over a col between the Lowther and Ullswater valleys.

3.8.17 **Copstone:** it is reported by Taylor (1986, 342), on the evidence of local verbal history, that there may have been a continuation between the end of the Shap Avenue at Rosgill and The Copstone; however, he reports that he personally had not identified any significant orthostats. Certainly the north-western-most section of the Shap Avenue (Burl 1993, 47-9) up to Rosgill (Thompson 1983, 138) is orientated towards The Copstone and bearing in mind the damage that has been inflicted upon the Shap Avenue within the last few centuries, it is possible that a further section extending across enclosed farming land has also been destroyed. The Shap Avenue, like the Moor Divock monument, links a series of funerary monuments and stone circles, and is a feature paralleled at many of the major avenues of Britain and Brittany. Burl has suggested that stone avenues served to link 'major ritual centres with lesser but vital elements such as rivers or mortality' (*ibid*, 72) because so many of the avenues led from the stone circle to water. It is perhaps significant that there is a ring cairn at Inscar (NY 5287 1930) on the approximate line between The Copstone and the western end of the Shap Avenue, and it is therefore possible that there was a major avenue or communication route extending at least 12 km from Hardendale to the shores of Ullswater, which linked a considerable number of funerary monuments.

3.9 ASKHAM FELL VIII: Monuments AF 157-173 and 184-202

3.9.1 This site group comprises a series of discontinuous stone banks and a possible field between a long band of quarrying and a long, east-west scarp edge at Riddingleys Top. The terrain is mainly gently sloping, well drained land. The monuments fall within two possibly unrelated sub-groups (A and B).

3.9.2 **Sub-group A (AF 157-173):** the dominant feature of the sub-group is a long, fairly straight but discontinuous stone bank (AF 162) which extends from a natural depression at its north-west end, to a series of banks and a partial enclosure (AF 161) at its south-eastern end. It contains only limited amounts of stone material, and is irregular in width. It is possibly the result of erratic stone

clearance along the line of a boundary. The partial enclosure (AF 161a) has decayed dry-stone walls on three sides, with the open side towards the west away from prevailing winds (6.3 x 6.1 x 0.55 m). It was possibly a field. Extending south-east from the partial enclosure is a broad bank (AF 161b) with a T-shaped bank (AF 161c) adjacent to its southern end. These define the sides of a narrowing corridor, and have some characteristics typical of a complex entrance. Although bank AF 198 of sub-group B is orientated towards the end of the AF 161/162 boundary, there is not an unequivocal relationship between this bank and the sub-group B field system.

- 3.9.3 At the foot of the long, east-west scarp is a round cairn (AF 165) which although included within this sub-group is fairly remote from the other sites. It is large, well defined, very prominent and has a regular, slightly elongated, circular shape (9.9 x 8.3 x 0.75 m). It has a central depression as a result of antiquarian exploration, but otherwise has a regular profile. Its relative isolation and deliberate, substantial form would suggest that it was a prehistoric funerary monument.
- 3.9.4 **Sub-group B (AF 184-202):** a possible field at the southern end of the sub-group is erratically defined by banks and alignments of cairns. The upper boundary of the field is represented by the prominent and broad stone banks AF 198 and 199. Bank AF 198 is particularly uniform in width and stone quantity and may be a decayed dry-stone wall. The north-east end of AF 199 is linked to the lower 'field' boundary (AF 186) by a line of three, elongated cairns which are all orientated in the direction of the alignment. Bank AF 186 has a regular width, but is low lying. It runs parallel to the top boundary across a gully, and appears to end on top of a low raise. The south-eastern corner of the field is very poorly and erratically defined with banks AF 187 and 194 following a line along the edge of a small scarp and round a small mire. The line up-slope linking with bank AF 198 is possibly represented by cairns AF 191 and 193. The land within the erratically defined boundaries is of low agricultural quality. It is unimproved, fairly steep in places, and contains a small gully. It is not unknown for field boundaries to enclose low quality land (eg southern field of Heathwaite Fell IX) and there is a possibility that this land served as a field for a pastoral related activity rather than cultivation.
- 3.9.5 A possible continuation of the line of stone bank AF 199 extends beyond the edge of the 'field' and links with an east-west stone bank (AF 201). This latter bank is both prominent and has a regular width and height; it has a ditch on its down-slope side and clearly contrasts in form with stone bank AF 199. It is overlain by two modern field walls, but no continuation of the bank was observed beyond the western field wall because of dense vegetation cover. The bank was observed to continue beneath the eastern wall and beyond the extent of the present study area. Its full extent is therefore not shown on the plan.
- 3.9.6 Just below AF 201 and at the foot of a long break of slope is a pair of parallel ditches (AF 200) but no corresponding banks. They are deep, with well defined, sharp edges and their condition suggests that they are not of great antiquity. However they are overlain by the modern enclosure wall which was built in about 1840 (Spence 1935b, 64-5). The ditches and the bank converge at an acute angle and, although they merge, their stratigraphic relationship is not clear.

3.9.7 Below the scarp edge is a long stone bank (AF 185) which at the top is orientated along the contours, approximately parallel to the ditches (AF 200), and has a negative lynchet-like profile. It turns into a down-slope orientated section which is markedly less well defined; large boulders have been placed against its eastern side probably as a result of stone clearance. At the north-east end it is partly undercut by a small quarry. The land within the bank has a steep but uniform gradient and occasional surface stones.

3.10 ASKHAM FELL IX: Monuments AF 174-178

3.10.1 Adjacent to the line of funerary monuments (AF VII) is a long, scarp slope orientated approximately north-south, which falls away to the west. On top of the scarp is a line of five, well separated cairns (AF 174-178). They are mostly fairly small and slightly irregular, with the exception of cairn AF 178, which is fairly large, moderately defined and prominent (7.7 x 5.5 x 0.5m). It has a central disturbance hollow and there is a smaller adjacent mound which was possibly spoil from the excavation. As a result of the disturbance, the cairn has an irregular profile and shape, but its form is more consistent with a funerary than a clearance function.

3.11 ASKHAM FELL X: Monument AF 203

- 3.11.1 The enclosed settlement AF 203 is one of a pair on Skirsgill Hill. The other (RCHM(E) 1936, 24-6) at NY 4995 2325 was outside the survey area and was not recorded. The AF 203 settlement is on gentle sloping, slightly undulating ground with extensive limestone outcropping in the vicinity. Just to the south-west of the settlement is an elongated section of limestone pavement. Within the settlement is a small, crag outcrop which divides it into two sections, and exposed pavement in the southern sub-enclosures.
- 3.11.2 The settlement comprises an outer bank enclosing a series of sub-enclosures and possible hut structures (labelled a-k). The external bank is an integral element of the settlement; sub-enclosures are butted against it and huts are set into its corners. However, on the western side the bank does appear to divert around hut (a). The bank width is relatively uniform throughout (c 2.5 m) but there is a marked variation in height and definition; around the southern section there are large revetting stones in the external face providing evidence of dry-stone construction. This is also the most prominent section, but its maximum height is only 0.35m with respect to the external ground level. The north-western section is very low-lying, ill defined and appears to butt onto sub-enclosure (g).
- 3.11.3 The settlement was divided into three sections each with independent access from outside but no access between the southern and middle sections:
- 3.11.4 **Southern section:** this section is divided from the middle section by a 1m high crag line, and comprises two adjacent sub-enclosures (h and i) which are divided by an irregular, ill defined bank. There is an entrance through the outer bank into sub-enclosure (i) but there is no obvious break in the dividing bank and there is no visible access into sub-enclosure (h). The sub-enclosures are relatively large with fairly irregular shapes, and were possibly intended for stock control. There is

exposed limestone pavement in the sub-enclosures, below the external ground level. It would appear severe erosion, possibly by stock, has exposed the bedrock.

- 3.11.5 **Middle section:** this section comprises five huts (a, b, c, d and e) which all have entrances facing onto an irregular shaped courtyard that allows access to the main entrance through the outer bank (NY 49792 23133). There is no access to the southern section and only a small entrance into the northern section (via sub-enclosure k).

Hut (a) has a fairly regular, circular shape and a flat, internal area that is terraced into the slope (internal diameter 4.2 m).

Hut (b) is a small, circular and generally ill defined structure. The internal surface is approximately level but fairly bumpy.

Hut (c) is a very ill defined, irregular structure set into the southern side of the dividing bank between the middle and northern sections.

Hut (d) is a small circular hut set into a corner between the external bank and the boundary of sub-enclosure (g). It has a slight internal hollow.

Hut (e) is a relatively large, rectilinear structure adjacent to the crag which separates the middle and southern sections. The internal surface has been slightly terraced into the slope and is approximately level.

- 3.11.6 **Northern section:** this comprises four large, irregularly shaped sub-enclosures (f, g, j and k). Their access was from the outside via well defined entrances. The exception is sub-enclosure (j) which was essentially an extension of sub-enclosure (k) and had no independent access. The sub-enclosures contain ground that is approximately flat but slightly undulating and they are generally at a lower level than the adjacent middle section. Like the sub-enclosures of the southern section, their form suggests a stock control function.

- 3.11.7 There are indications of a possible track extending eastwards from the main entrance to the middle section. A break of slope defines the northern edge of a cambered track and its southern edge is marked by an ill defined bank which is initially parallel to the outer bank but then diverts to the east.

- 3.11.8 **Askham Fell X discussion:** the settlement appears to have been designed in order to utilise the enclosed land as efficiently as possible, but at the same time to separate the accommodation section from the agricultural sections. Access to the middle section was independent of the other two sections, apart from a small entrance into sub-enclosure (k). Access to the sub-enclosures was generally from the outside and mutually independent. Although this was an agriculturally practical arrangement, it was a defensive liability and there is an implication that this enclosed design was not a response to a period of hostility. This type of enclosed settlement is typically ascribed to the Romano-British period.

3.12 ASKHAM FELL XI: Monuments AF 204-209

- 3.12.1 An enclosed, rectilinear farmstead (AF 206) with a pair of associated small enclosures (AF 207-208) on a gently sloping and well drained terrain. However, there are substantial amounts of exposed limestone pavement throughout the area and also within the enclosed settlement (to a height of 0.4 m). Although some of

the pavement may have become exposed subsequent to the construction of the settlement, a few of the banks (eg AF 207) were built on top of pavement edges and a track was edged by the pavement. Clearly, parts of the pavement were exposed when the settlement was built.

- 3.12.2 The enclosed farmstead ($c2830m^2$) comprises an outer bank and a single, central long house. The bank is regular in width and height and displays occasional evidence of dry-stone construction and it would appear to be a decayed wall. The north-eastern section of this wall is beneath a modern field boundary, which was built around 1840 (Spence 1935b, 64-5). In the north-west side is a possible gap, but it contains ill defined, vestiges of the bank and is more likely to be a result of later disturbance than an original entrance. There are no other visible gaps within the outer wall, and it is probable that the main entrance to the enclosure was via the north-eastern side, opposite the entrance to the long house, and has therefore become obscured by the construction of the modern field wall. There are two, small, semi-circular structures (b and c) butted onto the south-eastern side of the outer wall, neither of which were internally terraced.
- 3.12.3 The long house is a regular, rectangular shaped structure (15.1x 7.9 x 0.35m) comprising decayed, but well defined outer walls. There is an entrance in the north-western side defined by a large portal stone on one side. The internal area is terraced into the slope and is fairly flat.
- 3.12.3 Extending westwards from the enclosed farmstead is a sunken track which is defined on both its northern and southern sides by the edges of limestone pavement. Although it exploits a natural feature it appears to have been expanded in places, partly to form a continuous corridor and partly as a quarry for stone. The track is crossed in places by low-lying lines of outcrop. These would not restrict pedestrian or animal traffic but would prevent the use of vehicular traffic.
- 3.12.4 The sunken track leads into and stops within enclosure AF 207, which has prominent and continuous outer banks but only the one entrance (26 x 26 x 0.5 m). The enclosure could have served to control stock and the sunken track would therefore have enabled the movement of stock into it.
- 3.12.5 Near to enclosure AF 207 is a three sided, rectilinear plot (AF 208) defined by prominent, uniform banks on two sides and a limestone pavement edge on the other. There is no evidence of a bank on the eastern side. The internal area has no exposed stone but is slightly undulating.
- 3.12.6 To the north of the enclosed settlement (AF 206) is a small rectangular hut which also has on side overlain by the modern field wall (size: 9.5m x 5.5m). It is in a much better condition than the AF 206 long house; it has dry-stone masonry throughout, well built corners and a well defined entrance in the south-western wall. Despite their spatial association, the differences in condition may be an indication that they were not contemporary.
- 3.12.7 **Askham Fell XI discussion:** the enclosures, hollow way and farmstead appear to be related elements of a single settlement. The form of the enclosed farmstead clearly contrasts with that of the nearby enclosed settlement AF 203 and was probably of a later date. The AF 206 hut is similar to examples on Bootle Fell (BF 892 and 897) which are dated by historical sources to the period between cAD 1250 and 1510. The farmstead is similar to one on Cock Law (Ramm 1970, 46-7)

which also has long houses in the centre of a rectilinear enclosure. An excavation of the Cock Law farmstead by K Hodgson produced a 17th century pipe bowl. It would appear that the form of the AF XI farmstead is consistent with a medieval or post-medieval date.

3.13 ASKHAM FELL XII: Monuments AF 210-212

- 3.13.1 A group of three apparently unrelated cairns on Heughscar Hill. The terrain is well drained and gently sloping, with extensive exposures of limestone pavement throughout. Cairn AF 212 is slightly prominent, large, approximately pear shaped and has a regular rounded profile (18.6m x 8.7 m). It is in a prominent position near the highest point of the hill and was possibly a funerary monument. Parish boundary posts have been set into the long cairn (AF 212) and cairn AF 210.

4. ARCHAEOLOGICAL IMPACT AND RECOMMENDATIONS

4.1 IMPACT

- 4.1.1 ***Prehistoric and Later Communications:*** Moor Divock (Askham Fell) forms a col between the Lowther and Ullswater valleys, and is the natural line of communication between these two valleys. In the prehistoric period there was a propensity to use upland routes, because the lower ground was often forested; hence the most famed British prehistoric routeway, the Ridgeway in the south of England, follows the line of upland escarpments. While it is often difficult to define the lines of prehistoric routeways, they can sometimes be established by the presence of distinct alignments of prehistoric monuments. The most notable of these in Northern England is the Moor Divock col, which is defined by a clear alignment of Bronze Age funerary cairns, and standing stones, coupled with a stone avenue, which comprises parallel rows of standing stones linking Bronze Age funerary monuments. These monuments are only the surface expressions of activity that took place on or adjacent to lines of communication, and while it is possible to avoid the identified surface features, there is every potential that the sub-surface remains of this activity will be more extensive and would be adversely impacted by the proposed pipeline.
- 4.1.2 In addition to the north-west/south-east line of communications, there is a further communication line that extends north-east/south-west and corresponds to the line of the High Street Roman Road (AF1) (Margary 1973). This road follows the high ridge route between Ambleside and Brougham Roman forts, extending over the summit High Street, named after the road. There are extensive hollow ways associated with the line of the road (LUAU 1997), demonstrating that it continued in use into the medieval period, and was clearly a communication route of some considerable importance over an extended period (Hindle 1998). What is perhaps more significant is that there are several substantial prehistoric monuments on the line of the road, including the Neolithic Cockpit stone circle (AF86) which is deliberately set at the head of Elder Beck, on a natural crossing point; there is a second stone circle further to the south-west on The Dodd, out of the survey area. This raises the possibility that the communication line of High Street has its origins in the prehistoric period, and was then reused and formalised in the Roman period to create the recognised High Street road. Given that the stone circle is likely to be of Neolithic date, this would suggest that the communication route was potentially of considerable antiquity.
- 4.1.3 The intersection, between these two apparently very important communication routes is on Moor Divock, of which one at least continued in use through at least the medieval period. It is therefore not surprising that there is a palimpsest of archaeological remains throughout the area reflecting erratic, intermittent activity and settlement, focused on this location, over a period of five thousand years. The earliest remains are demonstrated by the Neolithic Cockpit stone circle (AF86) while the subsequent Bronze Age is characterised by a series of massive round cairns / kerbed cairns, eg AF117, AF119 and AF130; a stone avenue (AF121); a ring cairn (AF115); standing stones; and a series of cairnfields. The Roman period is characterised by the long section of road (AF1) and a pair of Romano-British

settlements (AF203) on Riddingleys Top. The medieval period is characterised by an enclosed settlement (AF206), also on Riddingleys Top, and post-medieval activity is characterised by encroachment of agricultural enclosure out from Askham, and by extraction for the lime industry (AF147 and AF180). During the same period the moor was in use for game shooting, evidenced by the lines of grouse butts across the eastern part of the fell. The net effect of this palimpsest of activity is that it is one of the more important archaeological landscapes in the North West.

- 4.1.4 **Option 1:** the western section of the pipeline follows the same route as that of Option 2. Extending out from the Covered Reservoir, the proposed route follows the line of the existing bridleway, cuts through an early field system, and passes sufficiently close to a hut circle, that this will be destroyed as it is within the easement. It then traverses the line of the Roman road and crosses Elder Beck at an ancient crossing point; as a consequence it extends directly through the Cockpit stone circle. It then extends to the line of the north-west/south-east bridleway which it follows. This latter bridleway correlates with the approximate line of the prehistoric communication route as evidenced by an alignment of funerary monuments. The route extends close to the alignment of Bronze Age round cairns and cairn circles, the stone avenue, and within 10m of the Cop Stone (AF115), which is a surviving element of a Bronze Age ring cairn. The line continues over the col into the Lowther Valley into an area that has not been subject to formal archaeological investigation. Many of the more significant sites are Scheduled Monuments and as such are protected. The route extends close to many of these Scheduled areas, and passes directly through two Scheduled monuments: the Cockpit stone circle (AF 86) and the High Street Roman road (AF 1).
- 4.1.5 **Option 2:** as with Option 1, this follows a line to the immediate south-east of the bridleway and will extend through an early field system (AF7-15). At the point at which the route crosses the line of the High Street Roman road, it changes direction to follow the line of the Roman road precisely and crosses Elder Beck at the same point as that of the Roman road. As such it will directly impact a series of monuments that were possibly Roman bridge abutments. The pipe route then follows the line of the existing Roman road earthwork to the crossing with the north-west/south-east bridleway, and then follows the course of the Roman road over Heughscar Hill. This latter section comprises a well-founded track, and continues the observed line of the road by Elder Beck, and is probably the line of the Roman road; however, there are no extant surface features indicating its Roman origin.
- 4.1.6 Part of the line of the Roman road is a Scheduled monument and accordingly statutorily protected. The remaining sections of the road are considered by English Heritage to be of national importance, and are destined to be scheduled in the future, although this has yet to happen (K Robinson pers comm).
- 4.1.7 **Conclusions:** both routes will affect an archaeological resource of national importance. Where the easement corridor for the pipeline encompasses one of the many scheduled monuments there will be a need to provide an alternative route, the most notable example being on Option 1, where the proposed line extends through the middle of a stone circle. Where the routes do not directly effect the identified

surface monuments, there is nevertheless a considerable potential for sub-surface remains which will be potentially effected by the proposed pipeline.

- 4.1.8 The individual monuments combine to form a coherent and palimpsest archaeological landscape, that belies its formation over five millennia. The imposition of a major pipeline through Moor Divock would destroy the cohesion and character of such a nationally important archaeological landscape, even if the principal component monuments were not directly affected.

4.2 RECOMMENDATIONS

- 4.2.1 In its *Planning Policy Guidance Note 16* the Department of the Environment (DoE) advises that archaeological remains 'should be seen as finite, and non-renewable resource, in many cases, highly fragile and vulnerable to destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed'. It has been the intention of this project to identify the archaeological potential of the study area, which has shown that there are large numbers of nationally important sites and monuments, set within an extensive landscape. Most of the sites are Scheduled Monuments and are statutorily protected from damage through modern activities, including the installation of services, agriculture, tourism and building construction.
- 4.2.2 Given the considerable archaeological importance of the resource directly affected by both options, and that there will be considerable cost and time implications in taking a route through this resource, it is recommended that an alternative route be followed so as to minimise the impact upon the identified archaeology. It is not the role of the present study to suggest the line of alternative routes, but it is suggested consultation should be undertaken between the pipeline engineers and an appropriate archaeological consultant to achieve a route that will fulfil the needs of United Utilities whilst minimising damage to the archaeological monuments .
- 4.2.3 **Scheduled Monuments:** where the easement corridor for the pipeline encompasses one of the many Scheduled Monuments, an alternative route will need to be agreed, the most notable example being on Option 1, where the proposed line extends through the middle of a stone circle, that is probably of Neolithic date. Such a route should be deemed to be acceptable to the Secretary of State for the Department of Culture, Media, and Sport, and their advisors English Heritage.
- 4.2.4 Given the very considerable archaeological importance of the landscape as a whole, there would be a need for intensive evaluation of the corridor prior to the topsoil strip, even where no upstanding archaeological monuments survive. Following on from that is the potential need for an extensive programme of mitigation, such as excavation or landscape survey. Both of these elements would have considerable time and cost implications on the overall pipeline construction programme. It is not possible to quantify the costs of the more extensive mitigation phase until the evaluation has been undertaken, but it would be considerable.

5. BIBLIOGRAPHY

- Burl, A, 1976 *The stone circles of the British Isles*, Newhaven and London
- Burl, A, 1993 *From Carnac to Callanish; the prehistoric stone rows and avenues of Britain, Ireland and Brittany*, Newhaven and London
- Collingwood, R G, 1937 Two Roman mountain roads, *Trans Cumberland Westmorland Antiq Archaeol Soc nser*, **37**, 1-12
- Greenwell, W, 1877 *British Barrows: a record of the examination of sepulchral mounds in various parts of England*, Oxford
- Hay, T, 1938 Ullswater notes, *Trans Cumberland Westmorland Antiq Archaeol Soc*, **38**, 42-7
- Hay, T, 1943 The ford over Elder Beck, *Trans Cumberland Westmorland Antiq Archaeol Soc*, **43**, 25-7
- Hindle, BP, 1998 *Roads and Trackways of the Lake District*, Milnthorpe
- Lynch, F M, 1972 Ring cairns and related monuments in Wales, *Scot Archaeol Forum* **4**, 61-80
- LUAU, 1997 *North West Water Haweswater Estate, Cumbria: Archaeological Survey*, unpubl rep
- Margary, I, 1973 *Roman Roads in Britain*, London
- Ordnance Survey (OS) 1867 6" to 1 mile 1st edition map
- Quartermaine, J, and Leech, R, forthcoming *The later prehistory of the Lake District, the results of upland surveys*
- Ramm, HG, 1970 Shielings, farmsteads and stack stands in the northern Border Country, in *Shielings and Bastles*, Royal Commission on Historical Monuments (England), 1-57, London
- RCHM(E), 1936 *An inventory of the historical monuments in Westmorland*, Royal Commission on Historical Monuments (England)
- Simpson, C, 1883 Stone circles near Shap, Westmorland, *Trans Cumberland Westmorland Antiq Archaeol Soc* **6**, 176-82
- Spence, J, 1934 An early settlement on Moor Divock, *Trans Cumberland Westmorland Antiq Archaeol Soc* **34**, 45-9
- Spence, J, 1935a A note on tumuli on Threepow Raise, Moor Divock, *Trans Cumberland Westmorland Antiq Archaeol Soc*, **35**, 66-8
- Spence, J, 1935b An early settlement near Askham, *Trans Cumberland Westmorland Antiq Archaeol Soc* **35**, 61-5
- Sweeting, M, 1974 Karst geomorphology in north-west England, in AC Waltham (ed) *The limestones and caves of north-west England*, 46-78,

Taylor, MW, 1870 On the vestiges of Celtic occupation near Ullswater, and on the discovery of buried stone circles by Eamont side, *Trans Cumberland Westmorland Antiq Archaeol Soc OSer*, **1**, 154-68

Taylor, MW, 1886 The prehistoric remains on Moor Divock, near Ullswater, *Trans Cumberland Westmorland Antiq Archaeol Soc OSer*. **8**, 323-47

Thompson, MW, 1983 *The journals of Sir Richard Colt Hoare through Wales and England 1793-1810*, Gloucester

Trueman, M, Quartermaine, J and Isaac, S, 1989 *The 'Langcliffe Quarry' limeworks, Settle: an archaeological survey of the site and Hoffman limekiln*, unpubl rep

Waterhouse, J, 1985 *The stone circles of Cumbria*, Chichester

Yates, MJ, 1984a *Bronze Age Round Cairns in Dumfries and Galloway: an inventory and discussion*, BAR Brit Ser. **132**, Oxford

Yates, MJ, 1984b Groups of small cairns in Northern Britain – a view from south-west Scotland, *Proc Soc Antiq Scot* **114**, 217-35

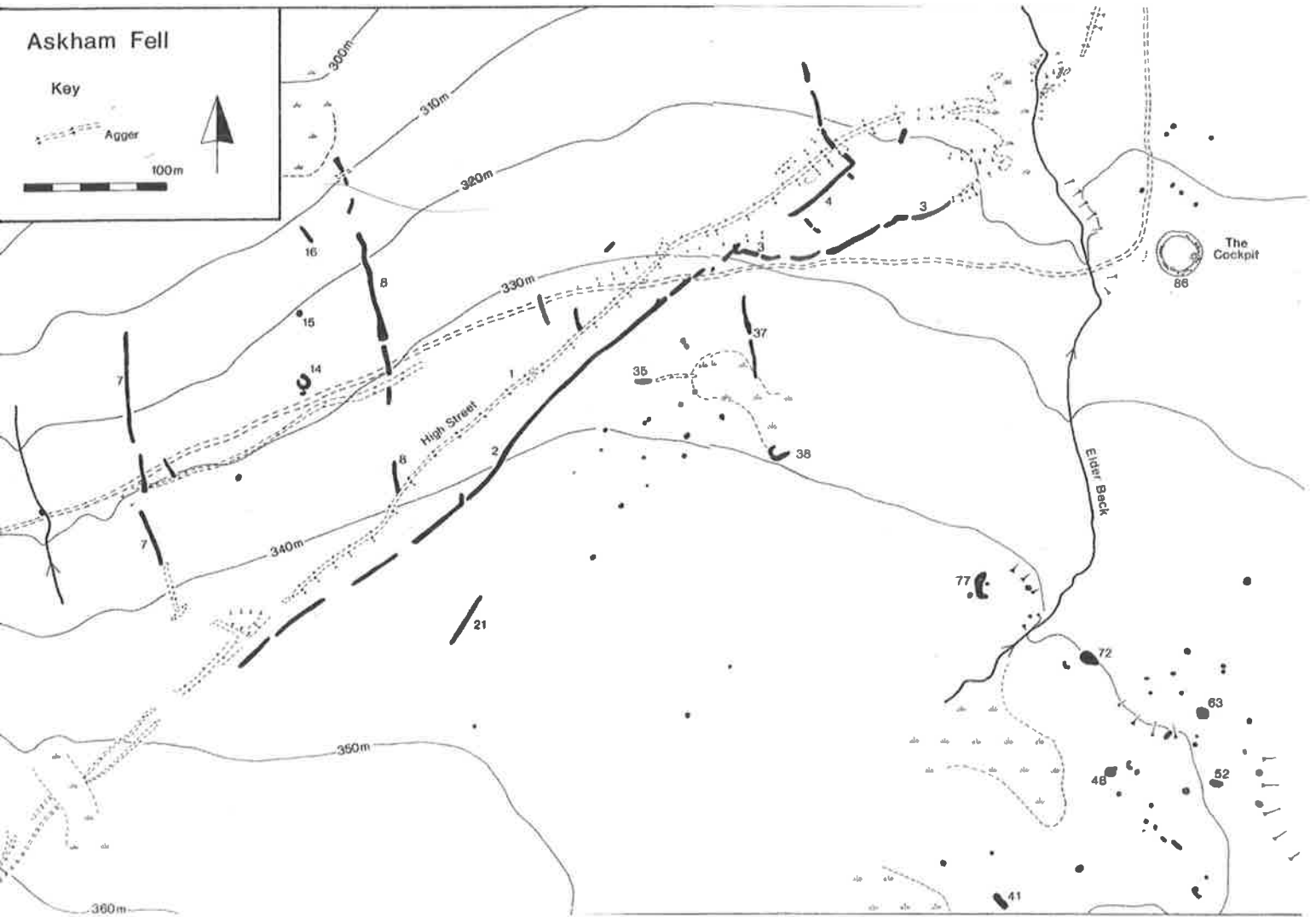
ILLUSTRATIONS

Askham Fell

Key

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DRAWING NO:

1

Scale 1:15000

DRAWN BY: CEH

DATE: October 2002

LOCATION:



KEY

- Extent of survey area
- Main areas of site groups
- Feature

TITLE

Askham Fell

COMMISSIONED BY:

United Utilities

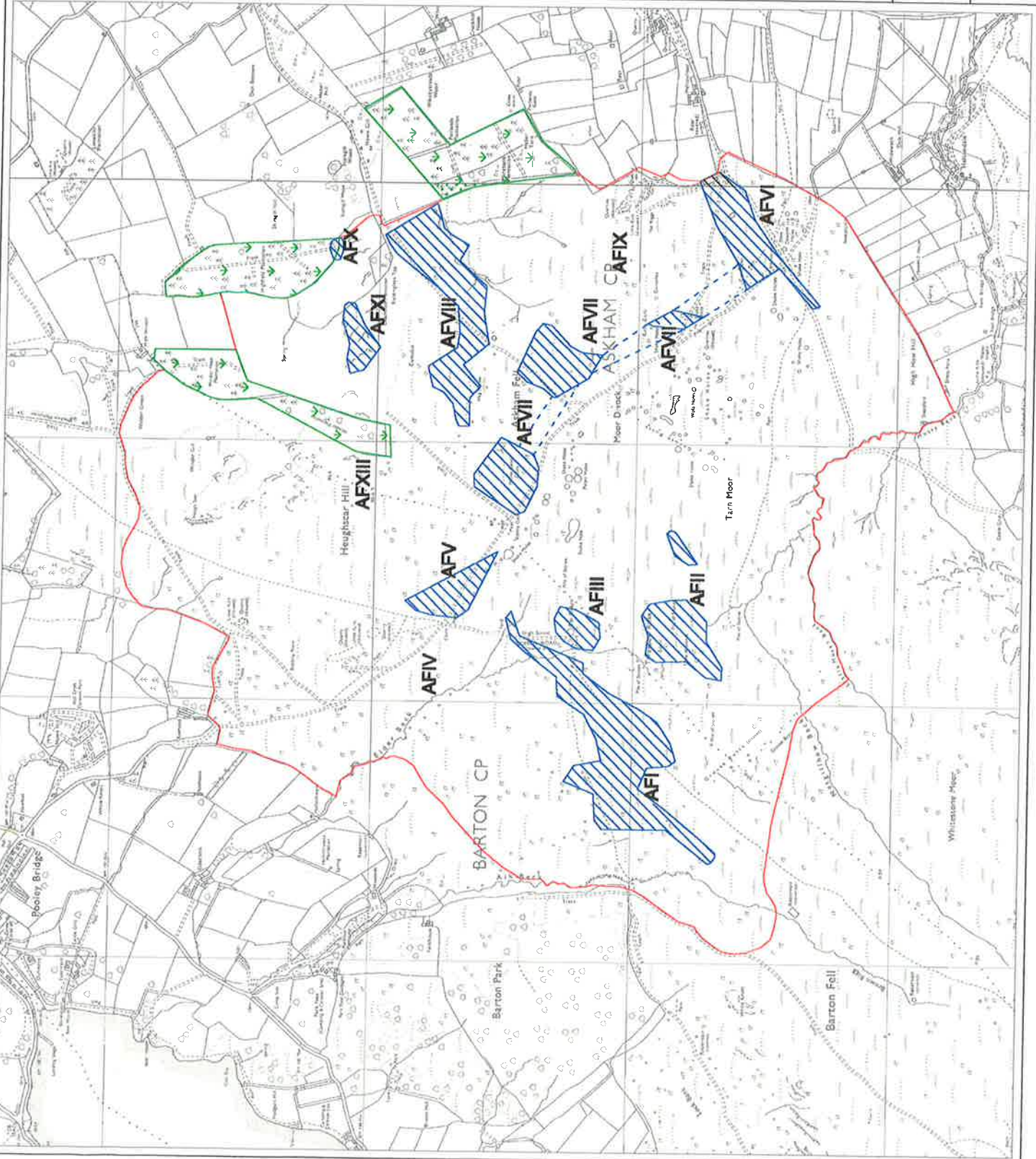


Figure 1 : Askham Fell



Oxford Archaeology North
Strey Institute
Meadow House Lane
Leicester
LA1 1TF
Tel 01524 846806
Fax 01524 846806

PROJECT:	Askham
DRAWING No:	1
Scale:	1:15000
DRAWN BY:	CEH
DATE:	October 2002
LOCATION:	
KEY:	Extent of survey area Survey grid
TITLE:	Askham Fell
COMMISSIONED BY:	United Utilities

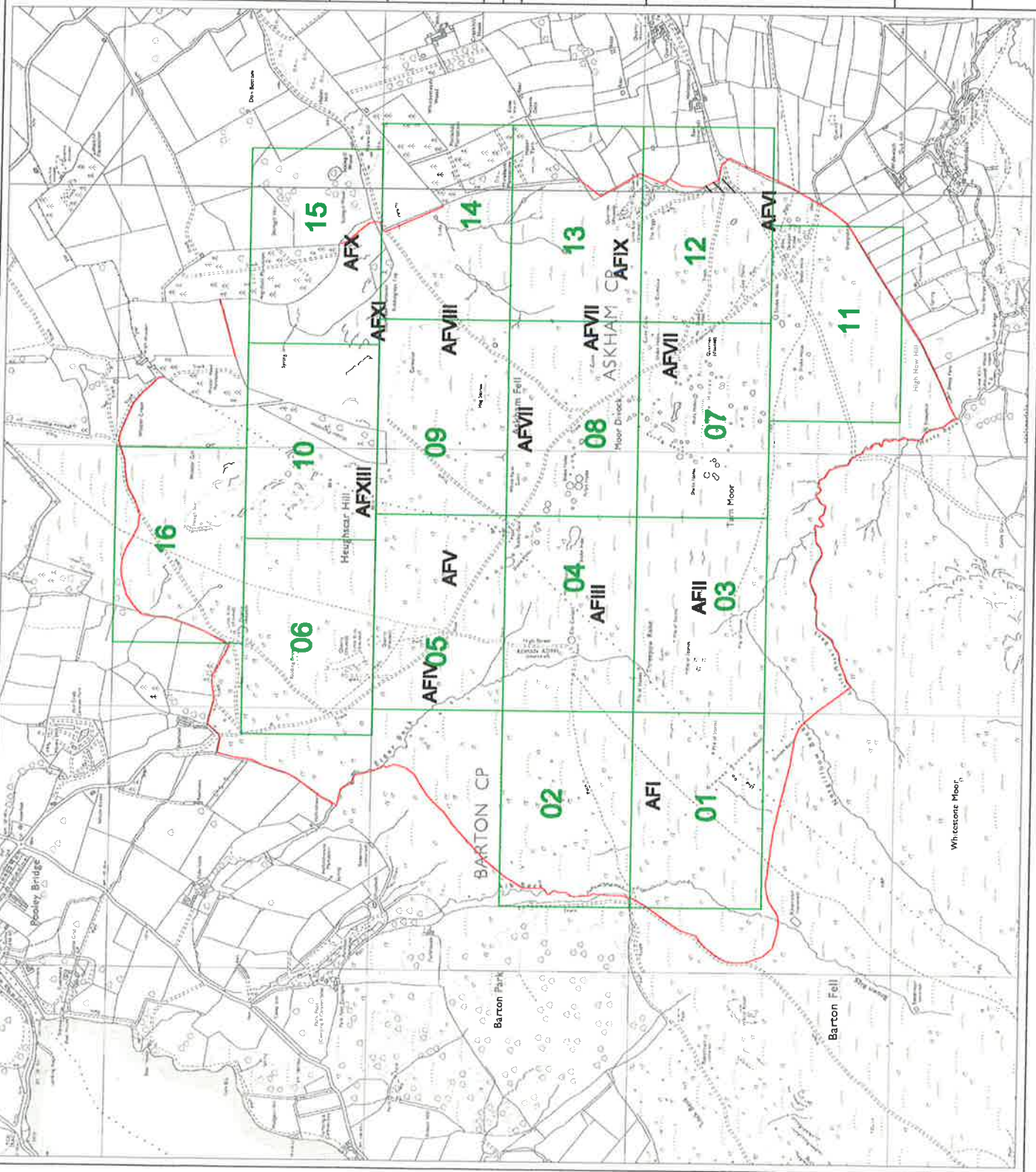

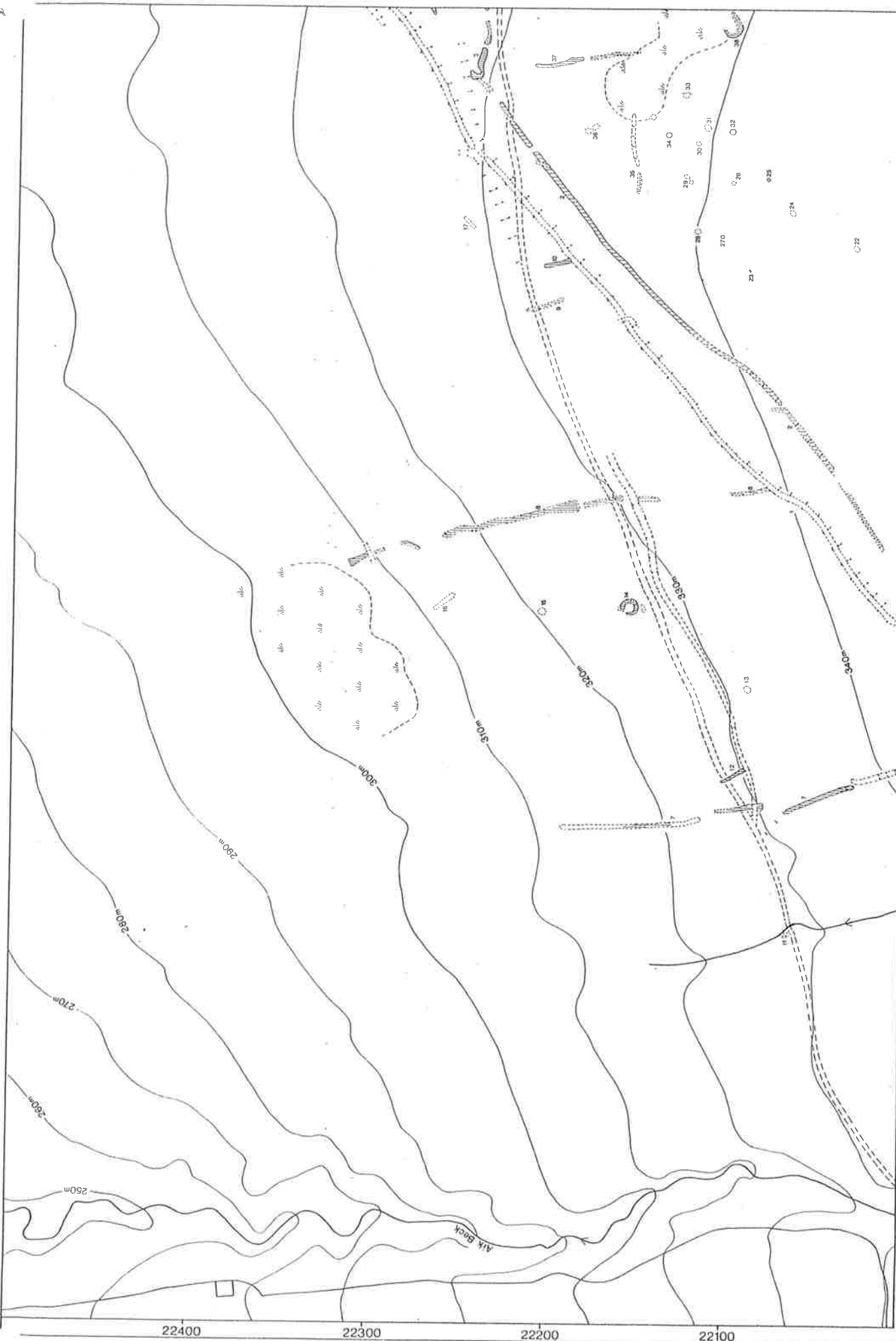


Figure 2. Plan Layout



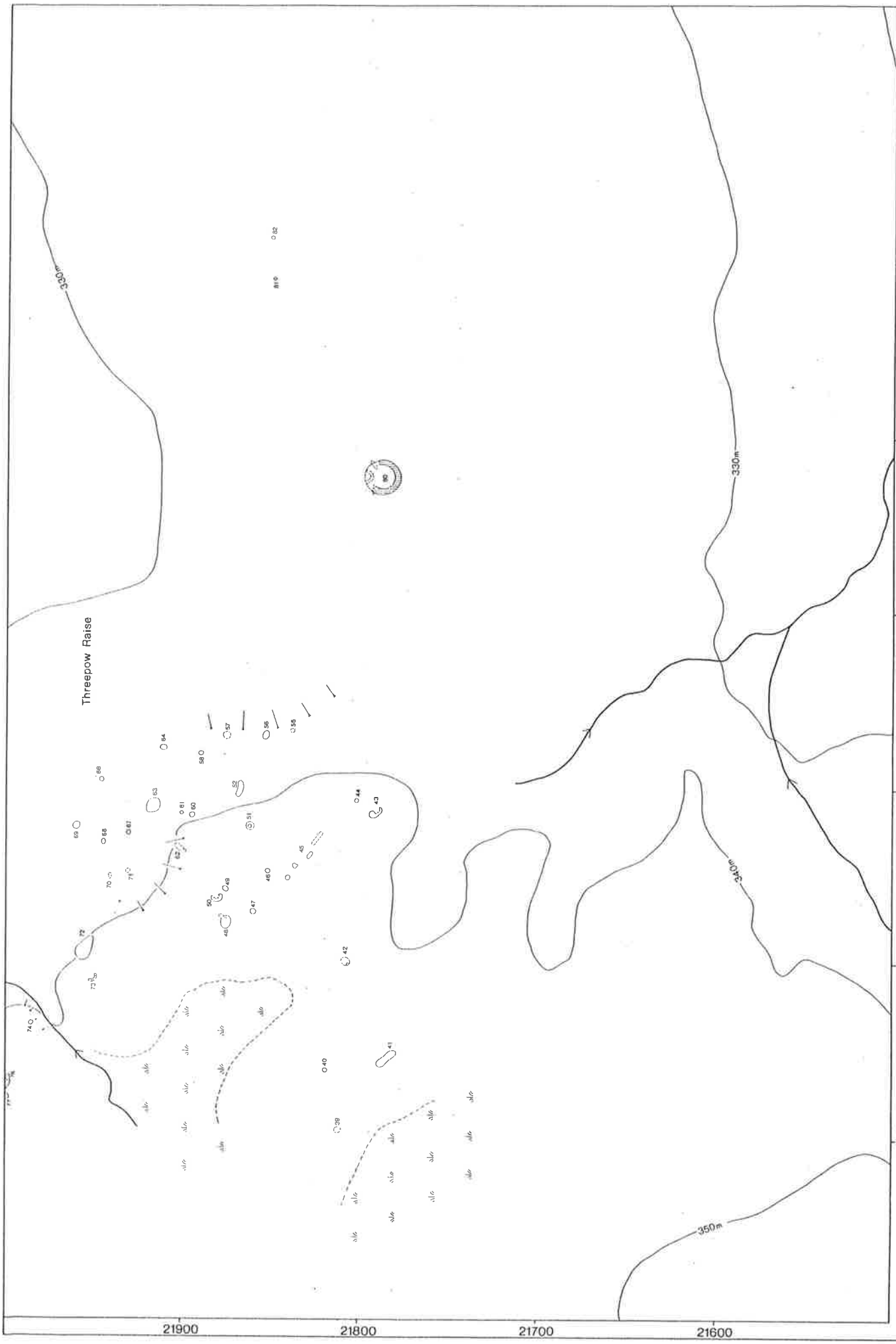
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LDNPS						
ASKHAM FELL						
			COMMENTS			
			Topographical detail based upon the 1952 Ordnance Survey map, and other sources, with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.			
						
			DRAWN BY		JQ	
			DATE		5 - 1988	
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			SITE CODE			
			SHEET No			
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER						



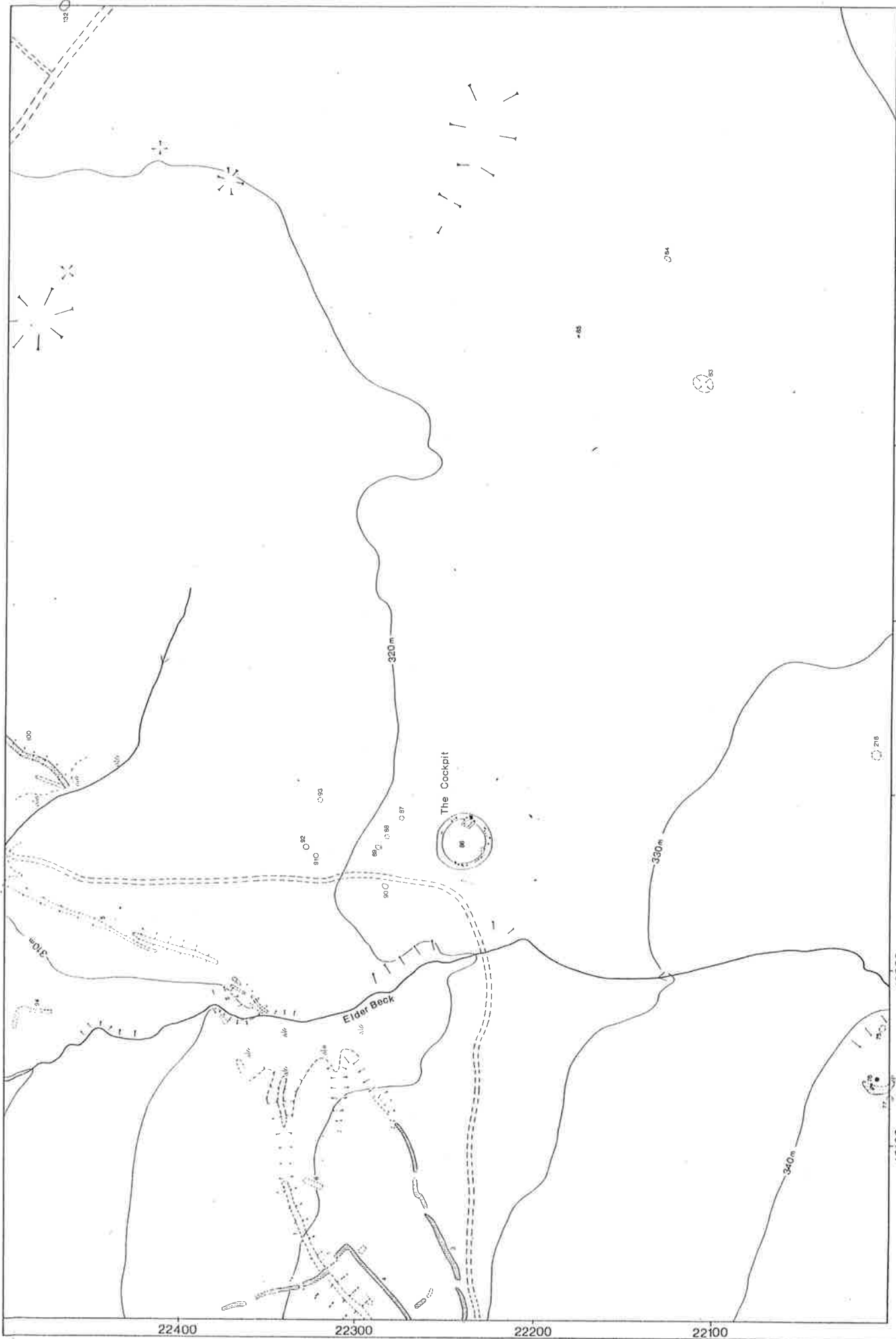
47300	47400	47500	47600	47700	47800	47900	
LDNPS	ASKHAM FELL	PLAN NAME	Aik Beck	COMMENTS	Topographical detail based upon the 877 Ordnance Survey 1:50,000 map with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright Reserved.	DRAWN BY	JQ
						SCALE	1:1000
						DATE	5-1988
						SITE CODE	
						SHEET No.	2



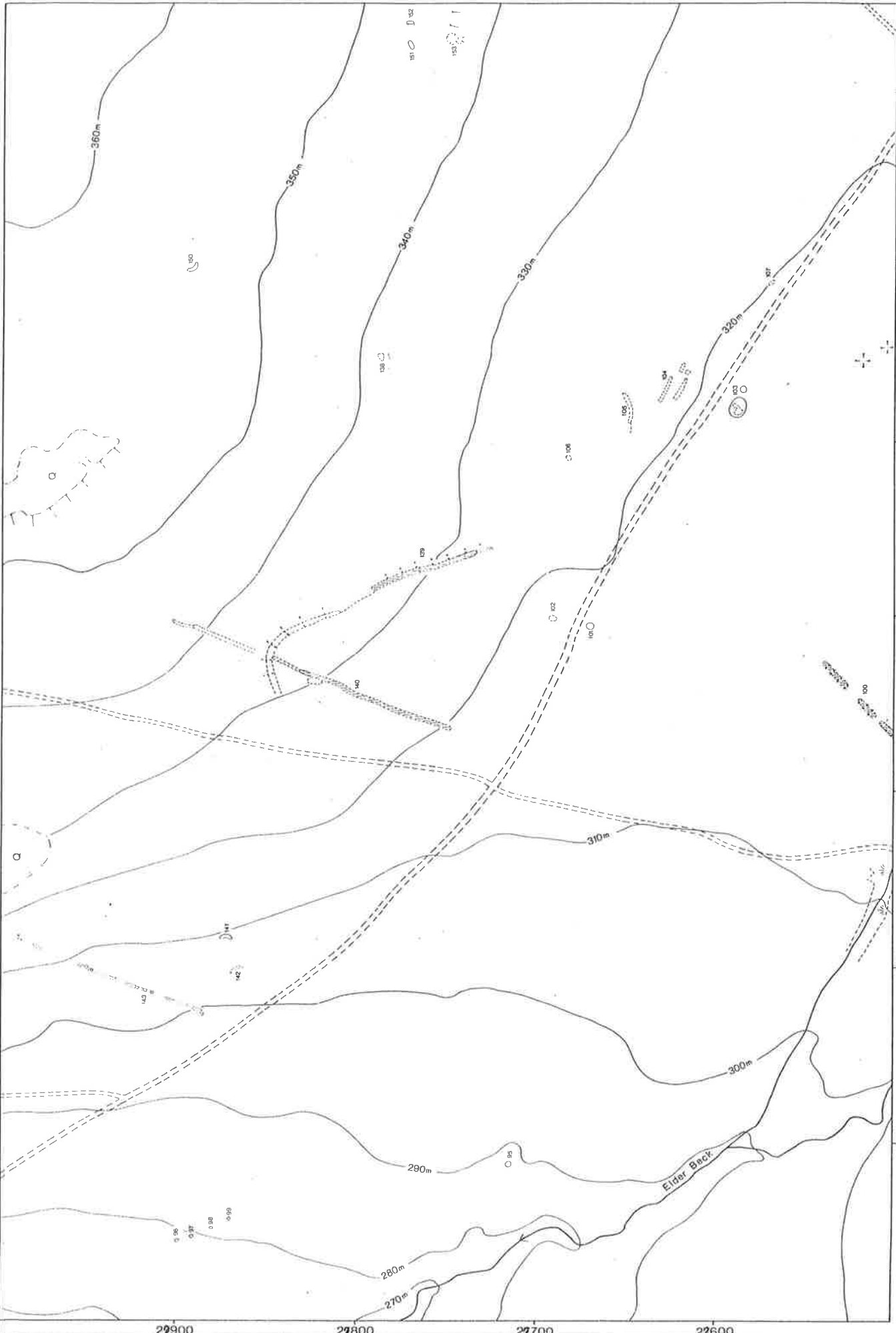
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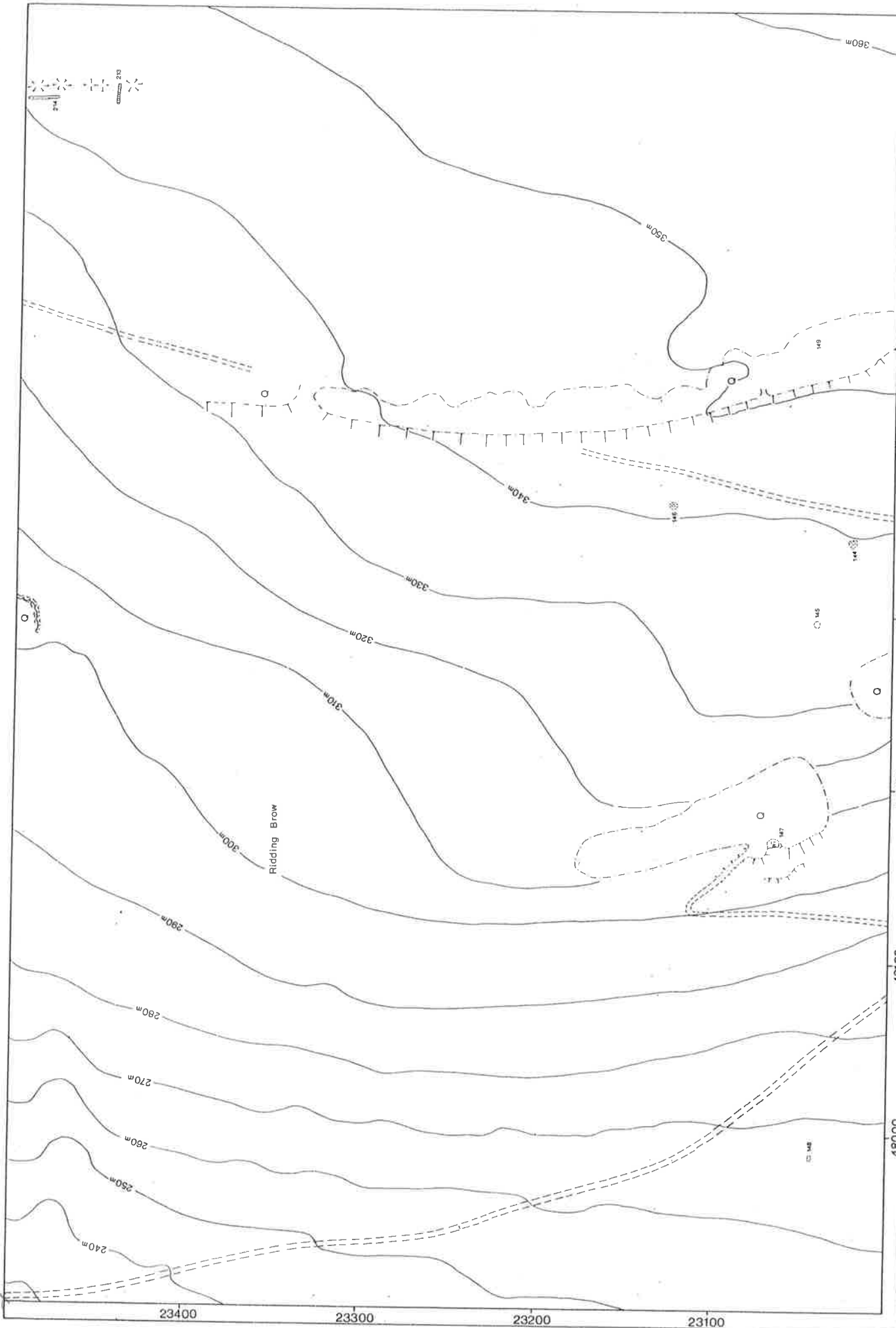
LDNPS	48100	48200	48300	48400	48500	48600	48700
ASKHAM FELL	Threepow Raise						PLAN NAME
COMMENTS Topographical detail based upon the 1878 Ordnance Survey 1:10,000 map with the permission of the Controller, Her Majesty's Stationary Office. Crown copyright reserved.							SCALE 1:1000
DRAWN BY JQ				DATE 5 - 1988			
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LDNPS ASKHAM FELL	48100	48200	PLAN NAME The Cockpit	48300	48400	48500	48600	48700	SCALE 1:1000	SHEET No 4
									DRAWN BY JQ	
COMMENTS Topographical detail based upon the 1875 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.										
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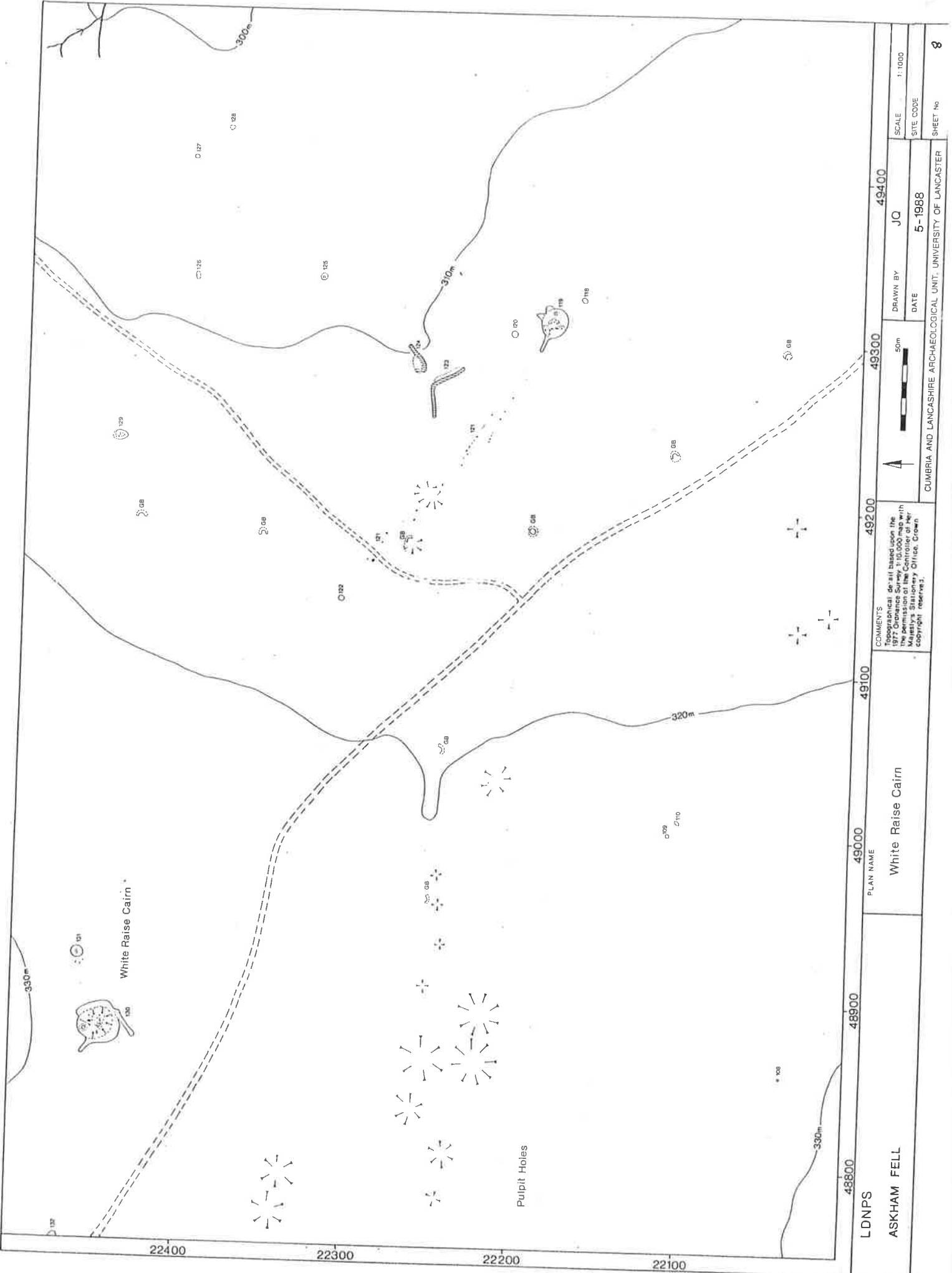
LDNPS ASKHAM FELL	48100	48200	48300	48400	48500	48600	48700	SCALE	1:1000
								SITE CODE	JQ
COMMENTS Topographical detail based upon the Ordnance Survey 1:50,000 map with the assistance of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.								DRAWN BY	JQ
A north arrow pointing upwards.								DATE	5-1988
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER								SHEET No.	5



LDNPS	48000	48100	48200	48300	48400	48500	48600
ASKHAM FELL	Ridding Brow						PLAN NAME
COMMENTS This plan is a detail based upon the 1977 Ordnance Survey 1:10,000 with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved							DRAWN BY JQ
SCALE 1:1000							DATE 5-1988
SITE CODE 5-1988							SHEET No 6
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER							



LDNPS ASKHAM FELL	48800	48900	49000	49100	49200	49300	49400
	PLAN NAME Wofa Holes						
COMMENTS Topographical detail based upon the 1977 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved.							SCALE 1:1000
 							SITE CODE 5-1988
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER							SHEET NO 7



LDNPS
ASKHAM FELL

PLAN NAME
White Raise Cairn

COMMENTS
Topographical detail based upon the 1977 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.



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JQ

DATE
5-1988

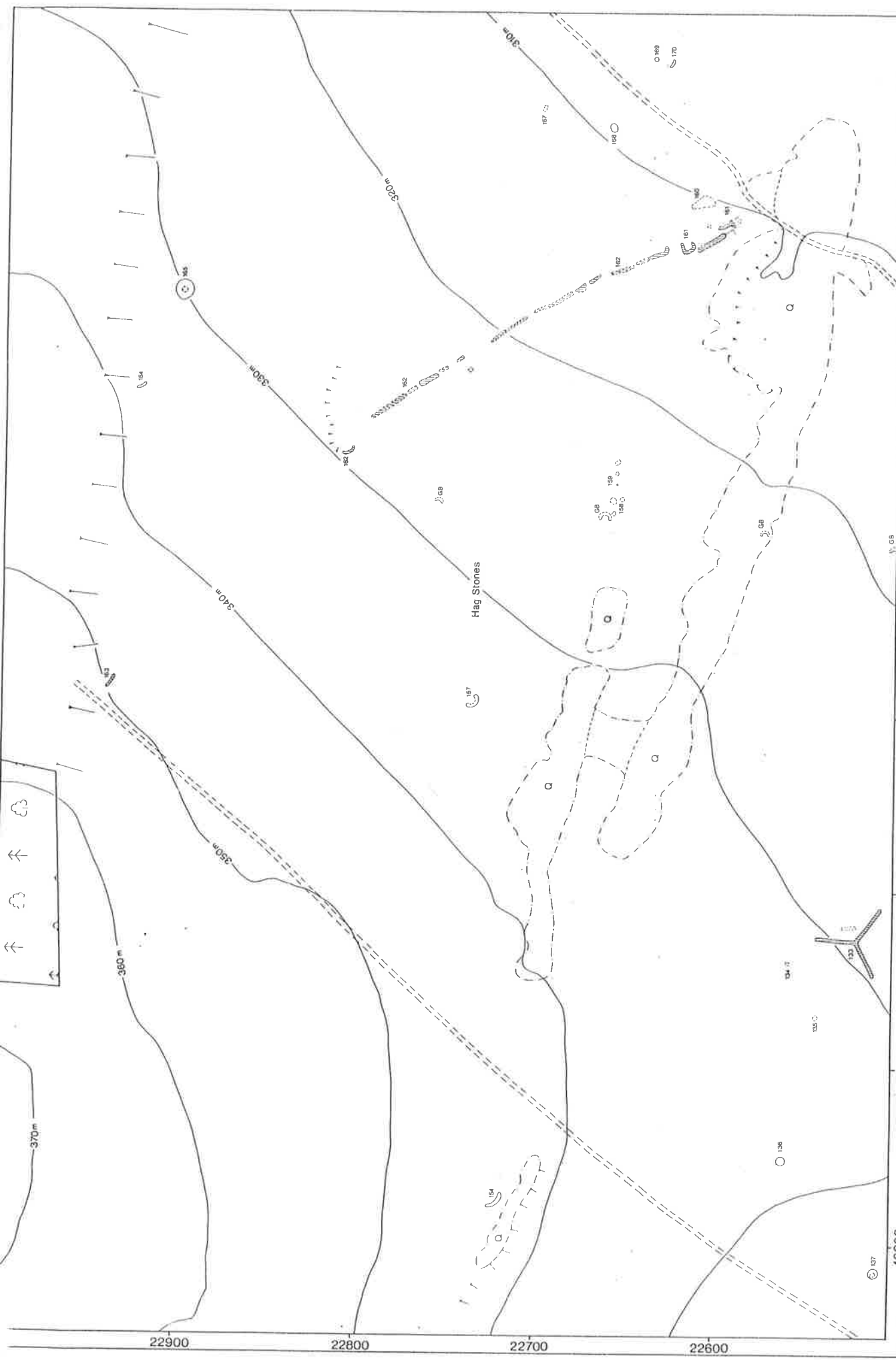
SCALE
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SITE CODE

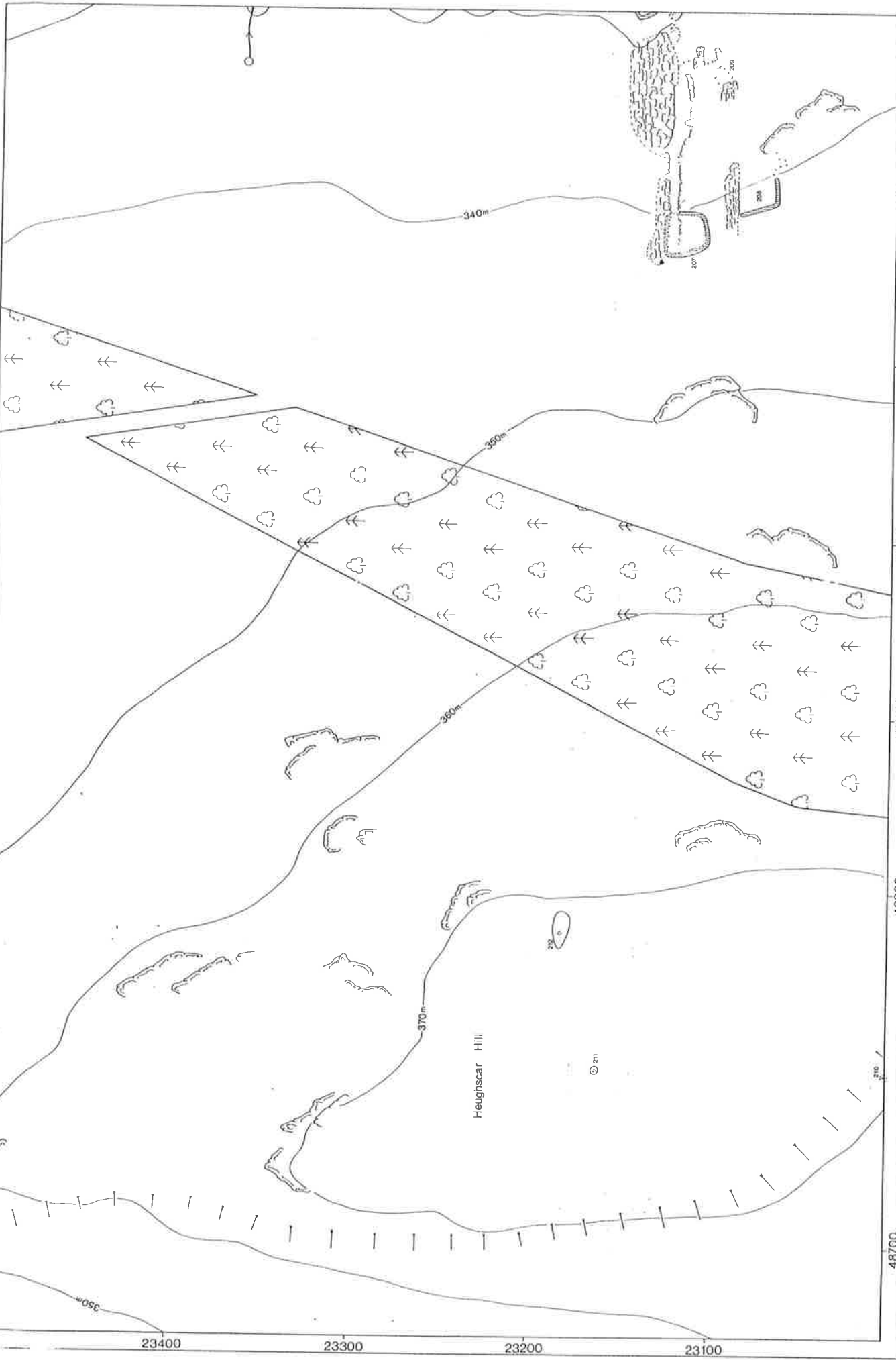
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SHEET No

8




LDNPS	48800	49000	49100	49200	49300	49400
ASKHAM FELL	Hag Stones		Hag Stones			
PLAN NAME			DRAWN BY JQ			
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER			DATE 5-1988			
SCALE 1:1000			SHEET No. 9			
SITE CODE			5-1988			
COMMENTS Topographical detail based upon the 637 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.			50m			



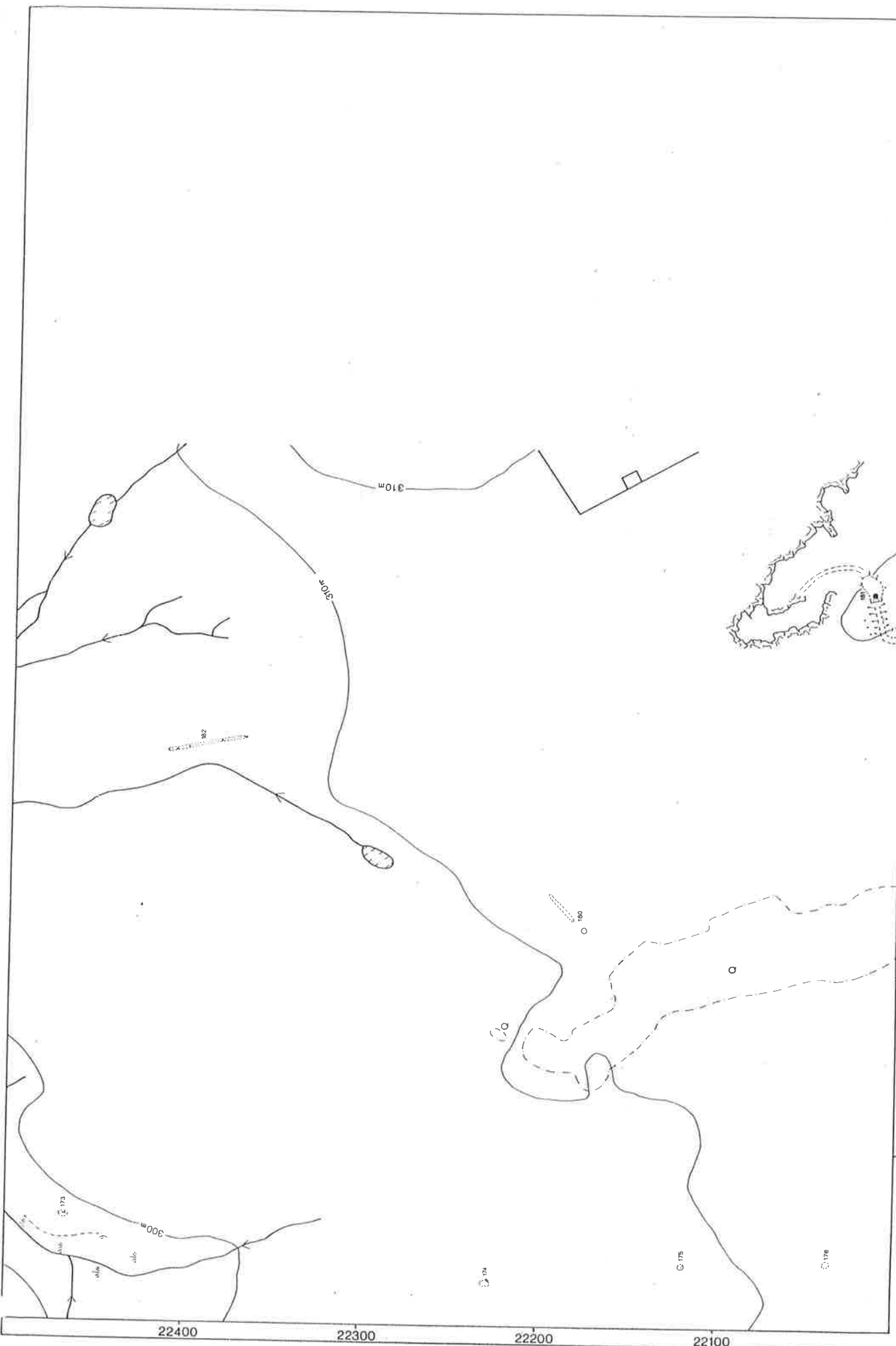
LDNPS	48700	48900	49100	49200	49300
ASKHAM FELL	PLAN NAME		Heughscar Hill		
	COMMENTS		Topographical detail based upon the 1:50,000 Ordnance Survey 1:10,000 map with the addition of the 1:25,000 scale of the Ordnance Survey's Stationery Office's Green copyright reserved.		
	SCALE		1:1000		
	DRAWN BY		JQ		
	DATE		5-1989		
	SITE CODE				
	SHEET No		10		
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER					



LDNPS	49200	49300	49400	49500	49600	49700	49800	49900
ASKHAM FELL	PLAN NAME		Dewpot Holes	COMMENTS		DRAWN BY		JQ
				Topographical detail based upon the 1977 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.		DATE		5-1988
				 		SHEET No		11
				CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER		SCALE		1:1000
						SITE CODE		



LDNPS	49600	49700	49800	49900	50000	50100	50200
ASKHAM FELL	PLAN NAME		Cop Stone	COMMENTS			
				Topographical details based upon the 1977 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office, Crown copyright reserved.			
			PLAN NAME	Cop Stone	DRAWN BY		
			49700	49800	49900	50100	JQ
			49600	SCALE		1:1000	
			SHEET No		5-1988	DATE	
			LDNPS		CUMBERIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER		
			ASKHAM FELL		SHEET No		
					12		



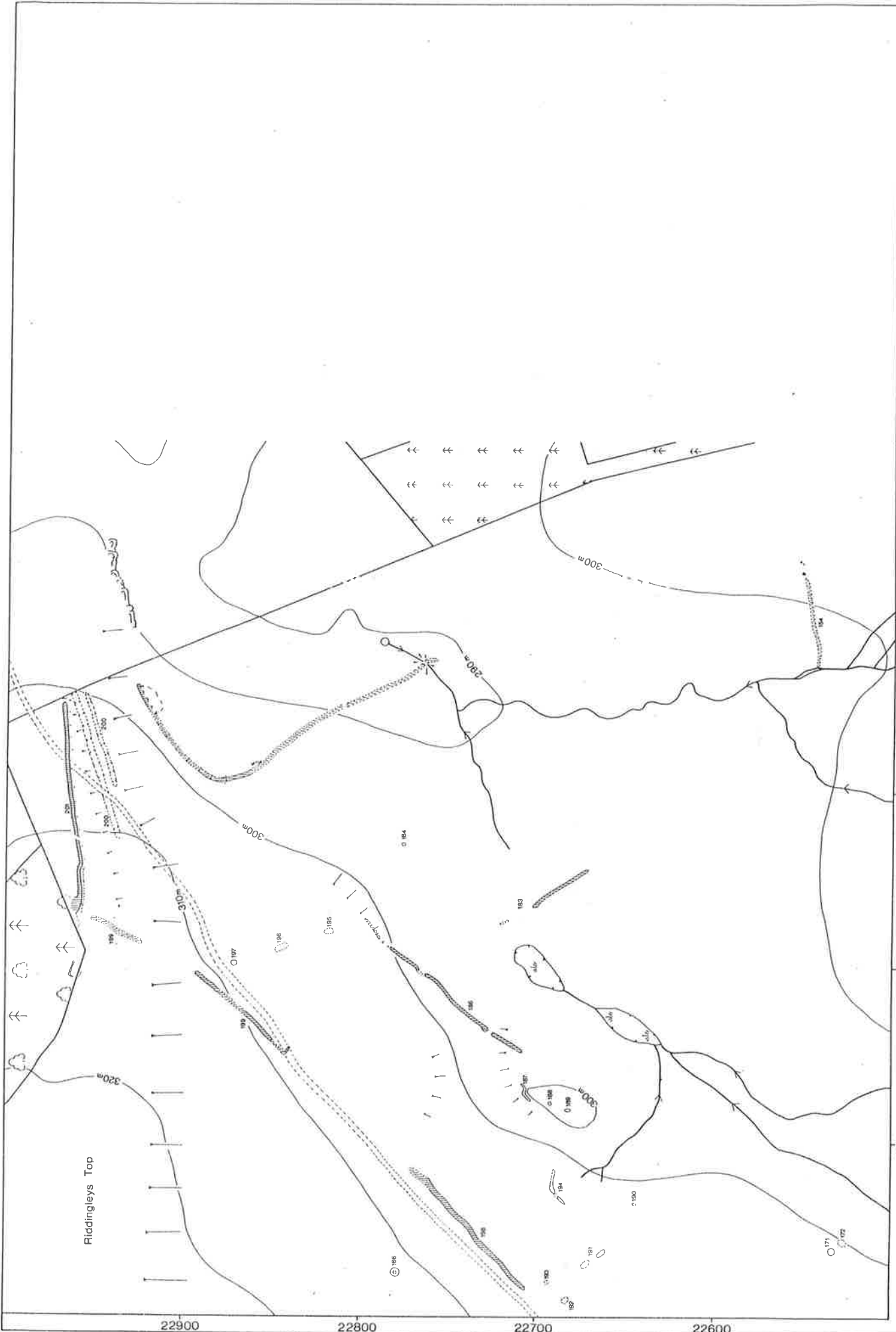
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ASKHAM FELL		JQ		DRAWN BY	JQ
		5-1988		DATE	5-1988
		CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER		SITE CODE	
				SHEET No	13

COMMENTS
 Topographical detail based upon the 1:50,000 Ordnance Survey 1:50,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.

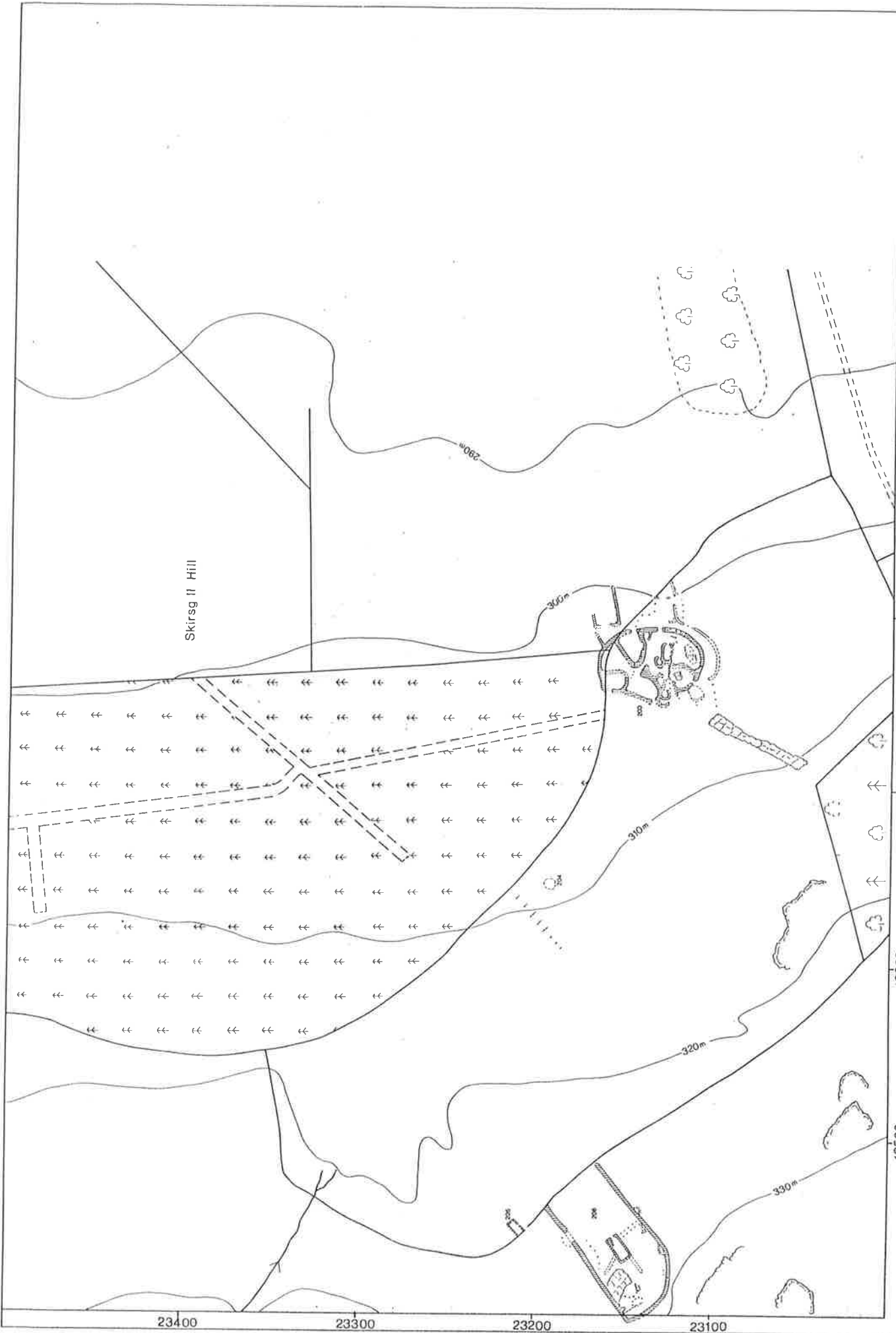


49600
49700
49800
49900

22400 22300 22200 22100



LDNPS	49600	49700	49800	49900	50000	50100	50200
ASKHAM FELL	Riddingleys Top		Riddingleys Top			Riddingleys Top	
PLAN NAME		COMMENTS					
Riddingleys Top		Topographical details based upon the 877 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.					
DRAWN BY		DATE		SCALE		SHEET No	
JQ		5 - 1988		1:1000		14	
CUMBRIA AND LANCASHIRE ARCHAEOLOGICAL UNIT, UNIVERSITY OF LANCASTER							



LDNPS	49500	49700	49800	49900	50000
ASKHAM FELL	PLAN NAME Skirsgill Hill		COMMENTS Topographical detail based upon the 1975 Ordnance Survey 1:10,000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved.	DRAWN BY JQ	SCALE 1:1000
				DATE 5-1988	SITE CODE
					SHEET No 15

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