

**MOOR POND WOOD,
PAPPLEWICK
An Archaeological
Site Survey and some
Trial Excavations**



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PAPPLEWICK:
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Site Survey and some
Trial Excavations**

**Results of field survey for the
Moor Pond Wood Project,
Papplewick, Nottinghamshire**

*by
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MOOR POND WOOD PROJECT, PAPPLEWICK

A. INTRODUCTION

This report is Stage 2 of an archaeological study commissioned by the Steering Group of the **Moor Pond Wood Project, Papplewick** in 2000. It follows on from a Stage 1 desk-top study of former mills, mill-ponds and associated earthworks to the south-west of the village submitted to the Steering Group in March 2001; this was entitled *Moor Pond Wood, Papplewick. An Archaeological Desk-top Study*. That report collated documentary references, maps and previous written reports about the site and suggested where further research was desirable. To put the site in context, there was also passing reference to related earthworks and former mill sites to the south of the study area. As originally intended, the desk-top study was to be followed by detailed field survey and this was carried out late in the same year and completed in spring 2002, delayed in part by the late onset of autumn adversely affecting survey conditions in a largely wooded environment. The area looked at runs north-south for about 1.2km due east of the River Leen and west of the village of Papplewick. It includes a set of leats and overflow ditches, banks and former millponds, all of which were part of a sophisticated water management system that provided power to a series of cotton mills in the late 18th century. The system had not been fully surveyed previously, and how it functioned is still not fully understood.

The field survey was conducted using an electronic digital theodolite (or EDM) to complete, through CAD, a set of cross-profiles and a plan of parts of the system not previously recorded in detail. The profiles (lettered A-J) were set out at intervals to determine the varying heights and relationships of the separate lengths of leats, ponds and the River Leen. A plan was also made of the earthworks and depressions south of Papplewick Lane which had not been surveyed to any great accuracy before; this area is shown in plan in Fig. 8, where basic survey information has formed the basis of a hachured hand drawing. The area to the north of Papplewick Lane had been surveyed previously but site inspection and some basic ground measurement was able to add more detail to the plan and to correct at least one error of interpretation. The hand-drawn plans are numbered 1-4, from north to south, covering an area from Top Upper Dam in the north to Grange Farm in the south. All the plans and profiles are reproduced here at a scale of 1:1000 for ease of comparison. The profiles have a vertical exaggeration of x2 to assist interpretation, and all major changes of angle of slope and major features have actual readings added above (to an accuracy of 0.1m). The accuracy of the readings is, however, relative to the differential effects of silting of ditch bottoms, the erosion of banks, ground subsidence (due to mining activity) and vegetation growth since the 18th century.

This report includes some additional text with conclusions and suggestions resulting from the site survey and from consideration of its results. It makes only brief mention of the historical background to the site as this has been comprehensively covered in the initial desk-top study and this is not repeated here. Whilst some maps referred to herein appear as figures in the earlier volume, this report makes particular reference to an estate map of Papplewick and Linby of 1847 which first appeared in the Greatrex article of 1986 (see references) and is shown here in Fig. 9. Otherwise, the two reports are complementary and

represent two separate stages in the archaeological study of a fascinating industrial landscape complex.

Amendment

First written in June 2002, this amended second edition was issued in March 2003 and includes the results of some archaeological excavations carried out by members of the Moor Pond Wood Project. These were at two of the sites mentioned in the text - their positions (Excavation Areas A and B) are highlighted in Fig. 1. In the Discussion section of the first edition report it was stated that there were parts of the system where further clarification through excavation was desirable. These included various sluice-gates, the curious circular feature above Papplewick Lane and, in particular, the south part of the system near Grange Farm. In this location the leat could be examined (a section of part of the bank is already exposed in a garden), and the site of the large mill explored. An initial geophysical survey in this area in January 2002 carried out by volunteers Alan and Celia Morris (at the behest of the author) appeared to have picked up indications of some surviving walling of part of the mill (Fig. 10). A depression below the survey area is where a large watermill may have been sited. The suggestion in the report (and later at a meeting with the members) that some archaeological trial-trenching in this area could be of value was met with enthusiasm and some trial excavations were organised to determine the nature of the archaeological record and the preservation of some of the surviving stonework.

Following liaison with the Steering Committee and with the permission of the farmer to proceed, a method statement was issued, showing the location of four trenches to be excavated near Grange Farm (Area A). These were excavated by volunteers from the village, supervised by the author, who also carried out site recording. About a dozen people excavated four trenches (Trenches 01-04) on Sunday 13th October 2002. They were then backfilled and the turf reinstated to leave as little disturbance as possible. Following the success of this undertaking, another work-party was organised for 17th November to uncover a known sluice-gate and adjoining stonework above the north-west corner of Moor Pond (Area B). Two areas with stone walling were cleared and recorded (Trenches 05, 06), and then soil was returned to leave most of the unmortared stonework protected as before.

This amended report is divided into two sections. The first element gives the results of the field survey (Section B) and discusses these in the light of the historical record (Section C). The second part deals with the results of these preliminary evaluation trenches (Section D). The two areas looked at are highlighted on Fig. 1, with the more precise positions of Trenches 01-04 shown in Fig. 11; plans and sections of each trench are featured in Figs 12 and 13. Figure 14 is a plan of Trenches 05 and 06 in Area B. Some of the features found are further shown in Plates 1-5.

B. DESCRIPTION OF THE SITE

The area covered includes the following features:

- three former mills (one now completely lost)
- two former millponds, now drained
- five connecting sections of a leat (ditch and bank)
- an overflow or drainage ditch that runs parallel to two of the sections of leat
- a former leat or 'canal' running south from the lower millpond
- a 'holding tank' or control area
- two possible additional reservoir ponds (possibly spring-fed)
- numerous sluices and weirs

Features shown in Plan 1 (Fig. 5; Fig. 2: profile A)

The area shown covers most of the irregular plan of the former millpond for the former Top or Castle Mill, still situated just south of the present course of Linby Lane; this is not shown on the plan. The area, formerly known as Upper Dam, now contains the circuitous route of the River Leen, which enters through a weir at the top north-west corner of the millpond from a higher smaller millpond (Top Upper Dam) and, to the south, is channeled beneath the road. A profile across Upper Dam shows that the millpond was relatively shallow, its base level now only about 1.5m below containing banks to east and west. A narrow and heavily silted leat defines the east side of the millpond, with its base being nearly 2m above that of the millpond. The rise of land to the east and the irregular course of the leat might suggest it was added later, and followed the pre-existing edge of the millpond. All other sections of leat to the south are relatively straight in comparison. If later, it probably dates to a period after 1782, when Top Mill is thought to have become operational (Chapman).

Features shown in Plan 2 (Fig. 6; Fig. 2: profile B)

The second stretch of leat runs south from Linby Lane and is nearly twice as wide as the first stretch, mentioned above. How the watercourse crossed Linby Lane is uncertain as the road has been widened and the connection between the two sections is now lost. South of Linby Lane the leat runs straight for about 200m and then deviates slightly to the south. The depth of the ditch at profile B, 72.7m, is not significantly different from that at profile A, where it is 72.3m. Running parallel to the leat is a lower ditch, narrower but deeply cut, whose purpose may have been to contain overflowing water from reaching adjacent farmland. Between the two ditches, in a now wooded area called Dam Banks, are other features hidden within the undergrowth, including small channels and some evidence for terracing. This area may be worthy of further investigation.

Features shown in Plan 3 (Fig. 7; Fig. 2: profile J, Fig. 3: profiles C, D)

To the south, the second length of leat culminates in and runs through a curious triangular-shaped enclosure with high banks surrounding it and a terrace within it. Openings at the east and south points of the triangle indicate former sluice-gates, in part confirmed by stonework still showing in places. At the north point of the triangle a narrow channel connects with the leat at a high side level and runs around a fully enclosed and deeply cut depression of unknown purpose. The former runs towards a boggy area which on various maps dating between 1835-1847 is shown as an irregular-shaped pond. It is shown on a map of 1847 (Fig. 9) with a fan-shape similar to that of Upper Dam. In both cases the shape may have resulted from the geomorphological effect of water flow through the middle. The pond here may have resulted from a westward-flowing stream or channeled spring water and the impeding effect of the bank around the triangular-shaped enclosure. It could then have acted as a reservoir to provide water to both the leat and the larger Moor Dam respectively. The close proximity of the lower drainage channel may also be significant, as excess water may have been a seasonal problem at this part of the system. All this remains speculative though.

Where the main leat comes towards the north-west corner of the larger reservoir, Moor Dam, there is compelling evidence for a controlling sluice-gate set between narrow high banks and above a major dip in slope. There is also stonework to be seen here. This point controls water-flow into the main reservoir, with only a narrow off-shoot channel providing water to enter a new section of leat. This break between what, for convenience, is here called the second and third sections of leat, appears to have been missed in previous site surveys. It may not have been the original arrangement however, and the leat may have once flowed unhindered through this point, before the demands of the main reservoir required a detour of water-flow.

Moor Dam, or Moor Pond Wood as it is presently known, covers a significant ground area and must have held a large quantity of water. Profile C indicates a depth of at least 4m from the top of the surrounding banks to the open water at the south end of the area. To the north, the base of the area rises to relatively dry ground at the far north end, which is most pronounced at the north-east corner. It may have been from this point, still the main access point into the woods, that the reservoir was largely infilled during the 19th century. This would explain the lower depth of the south end. Even when the area was shown fully dry on an Ordnance Survey map of 1915, a pathway through the middle of the area, stopped well short of the south end of the former reservoir.

The third section of leat, running alongside the west side of the reservoir, is accompanied by a drainage channel just down-slope. The leat stops abruptly with a rounded end above the south-west corner of the reservoir and above Papplewick Lane. Whilst it is aligned on a corresponding leat south of the Lane (the fourth stretch), there is no obvious evidence for a former viaduct across the road connecting the two. A circular brick-lined feature close-by may be related to whatever means was used to get water across the road, but only through excavation and recording can its purpose be determined for sure. On the First Edition Ordnance Survey map of 1880-81 it is shown as a well. The same map also shows Papplewick Lane narrowing here and this suggests that some form of structure may have crossed the road at this point. Culverts recorded down-slope at the corner of the area (pers.

comm. S. Walker) may have allowed water to flow from both the lower drain and from Moor Dam itself towards the River Leen when its water flow was sluggish and insufficient for other mills further down-stream. The management of water at this location of the site is uncertain and would benefit from further investigation.

Features shown in Plan 4 (Fig. 8; Fig. 3: profiles C, D, H; Fig. 4: profiles E-G, I))

The fourth section of leat runs south of Papplewick Lane for about 350m, where it also ends abruptly in a rounded end. This section of leat is slightly curving, contains a noticeably wide section of ditch, and appears to have been damaged at its north-east corner; the resulting shape is accurately portrayed on the 1847 estate map (Fig. 9). The bank appears to consist partly of gravel, and its shape may have become distorted by opportunistic quarrying close to a road, perhaps when it was widened in the early 19th century. At the broad south end of the leat, a small depression in the bank still indicates where water was channeled through and went down a steep slope, just west of Grange Cottages. Profile H shows a drop of over 3m. This down-slope appears to be partly defined on one side by a narrow bank. Towards the base of this slope, additional water may have arrived from a ditch to the west and from another possible reservoir to the east. Both features are shown as large bodies of water on the 1847 map (Fig. 9). This area is now heavily overgrown with vegetation and dumped rubbish, and at places is obstructed or impenetrable, thus making survey difficult, although further investigation could be informative. The shape of the east pond was also shown as fan-shaped on the 1847 map and its origin may have been similar. The area is now comparatively flat as a result of having been used as the village rubbish tip for some time (see profile I).

The fifth section of leat, south of Grange Cottages, is straight and relatively level but is now cut through by a boundary hedge, is heavily disturbed on its west side and has lost part of its east bank. It ends in a slight curve just above the lane to Grange Farm, where early 19th century maps show it flowed through a large mill building, alternatively and confusingly referred to as Old Mill, New Mill and later as Grange Mill. Some geophysical survey was conducted close to this point in early 2002 – see below.

In the field west of this leat are a number of depressions and a possible terrace where a former mill building once stood, according to the Linby tithe map of 1841. All trace of two other buildings immediately to the south have probably been lost where a deep depression can now be seen. The river to the west has been canalized and made straight and is crossed by a small bridge which is probably of 18th century date. The crossing is shown on the 1847 map, above an unknown building alongside the river which has since disappeared without trace.

C. DISCUSSION

The area looked at covers a distance of 1.2km, north to south. Within this length the River Leen falls about 8m in height (69.7 to 61.4m), a figure that includes two major drops in height at weirs at the two surviving mills, Top Mill and Walk Mill. A further fall of over a metre can still be seen where Top Upper Dam meets Upper Dam. In contrast, the leat that parallels the course of the river to the east maintains a consistent height for two-thirds of its length, with its ditch bottom averaging a level of 72.5m. Only when it crosses Papplewick Lane is there a fall in height of about a metre, with a further dramatic fall of 3m at the end of the fourth section of the leat, just above Grange Cottages. This shows that the leat was principally a water container, similar to a canal, and would have displayed little discernable water movement, except where sluices were opened. At the point mentioned above, the dramatic drop in height suggests that flowing water had to be contained along the final length of the leat where it approached and powered the mill formerly near Grange Farm.

Documentary sources indicate that the history of the mills along this stretch of the River Leen probably dates back to the medieval period (Sheppard 2001, 3). A map of 1692, featured in the same volume (Fig. 3), shows Walk Mill and the outline of its millpond. Although a mill at Top mill is not shown, the shape of Upper Dam is evident too, suggesting that both mill sites may have been in use before the late 18th century when George Robinson came to the area and set up his cotton business. Initially Robinson made use of 'bleaching grounds' on meadowland close to Walk Mill. These may have still been evident in the landscape in 1847 for the estate map of Papplewick and Linby (Fig. 9) indicates paddocks or small fields, together with a possible pond to the east of Walk Mill. This area slopes down towards the river, and facing south-west would have been suitable for setting out cloth to dry. A lower section close to the river, shown in outline in Fig. 8, may have been a pond used for soaking cloth.

Robinson started to build the mill, later to be known as Old Mill, near Grange Farm in 1778 and a new lease he took out at Walk Mill allowed him to make '*a Cut or Canal from the said Dam or River Leen to and for the use of a large building then erecting...*' This cut almost certainly ran from the south-east corner of Walk Mill Dam and part of its east edge can still be seen by differences in the vegetation within a long thin piece of land set between two field boundaries east of the present buildings at Walk Mill. South of Papplewick Lane the cut continued through a now heavily wooded area. Profile I crossed this and it reveals a wide gully-like feature, about 15m wide (Fig. 4), which is shown as a wide body of water on the map of 1847 (Fig. 9). This must originally have continued into where the fifth length of leat now runs, south of Grange Cottages.

After building this first mill in 1778, Robinson went on to build several others during the 1780s, with a final mill (Nether Mill, downstream) built by 1794. This set of mills would have required a lot of power to drive them and careful water management would have been a necessity. This was complicated by more mundane matters - between 1785-90 Robinson was in legal dispute with a neighbour, the 5th Lord Byron, over water rights. This dispute may well date from earlier in the decade, finally coming to court in 1785. Both factors must have been instrumental in Robinson creating the complex water management system that we see today. It also begs the question of whether there were phases of construction,

brought on by changing circumstances. As mentioned above, a canal was initially cut from Walk Mill Dam towards the Old Mill in 1778. This same supply may have provided a tail-race for another mill, Lower Mill, built downstream by 1782. The long length of leat from Upper Dam probably dates to just after this period, when the water issue was beginning to become contentious and critical. Climatic conditions at this time probably played little influence. The latter half of the 18th century was noted by one observer of climate, Thomas Barker, as a period of increasing moisture (Kington, 19). Floods in 1770 had resulted in moves to modify the flooding capacity of rivers with the creation of flood-banks etc. (Potter) and the year of 1783 was especially wet, causing more flooding in places. The leat around Upper Dam, if dug at about this time, may have taken advantage of natural run-off water from the field to the east.

The presence of a smaller ditch or drain down-slope of the leat also suggests that water was considered precious enough that any overflow from the main channel should be captured before it ran to the river. The leat may have originally run continuously towards the mill-site near Grange Mill, perhaps to build up a head of power for both this mill and the one beyond, Lower Mill.

By the mid-1780s when Robinson was constructing two additional mills (Forge Mill and New Mill, the latter an enlargement of his Old Mill near Grange Farm), he was considering legal action against his neighbour. The outcome of this would have been unknown, and so the author suggests that possibly at this stage, as a precaution, Robinson initiated the excavation of the Moor Dam reservoir, along with ponds at north and south ends and a control system (the triangular-shaped enclosure at the north-west corner of Moor Dam). This was intended to protect, supplement and regulate the water supply in both the leat and within the river itself for the large purpose-built cotton mills that Robinson had built below Walk Mill. Both the latter and Top Mill to the north had pre-existing millponds dependent on water coming directly through land controlled by Lord Byron; this could explain why these two particular mills failed to receive the investment to make them as large as the other mills, being more vulnerable to fluctuations in the water supply. Without more detailed historical records or large-scale archaeological investigation it is unlikely that this three-stage phasing, as postulated above, could ever be proved.

C. EXCAVATIONS

Brief notes on the results of trenching by amateur volunteers in October- November 2002

AREA A, Grange Farm: TRENCH 01 (Figs 1, 11, 12)

A trench 3m long and 0.6m wide was excavated across the leat near the site of the former mill. A stone-lined culvert was reported to have been witnessed in this general locality and the trench was intended to see if it might still exist in this southerly position. Culverts are found on other mill-sites such as the Arkwright mills at Cromford, Derbyshire, and here at Papplewick a similar structure could have helped to channel water in both sufficient quantity and at some speed on the down-slope towards the Robinson mill's water-wheel. However, the excavation only uncovered a relatively modern ceramic field drain (0003) at a depth of 0.7m. The wide cut for this through the sandy-clay composition of the bank was evident in the section. As there was no sign of a foundation cut for an earlier feature, it suggests that any stone culvert would have been at a shallower depth and that the later drain cut had probably removed all trace of its position within the leat.

AREA A, Grange Farm: TRENCH 02 (Figs 1, 11, 12)

A trench 3m long and 0.6m wide was excavated to investigate an area within a noticeable depression and where the geophysical survey had found evidence for disturbance. Beneath the topsoil and a shallow subsoil the trench uncovered a series of ash and clay layers (0005-0008), and a layer of bricks (0009), 2¼ - 2½ inches thick, 4½ ins wide and 9 ins long (60 x 115 x 230mm). Beneath these layers was a layer of varied discarded rubbish and dark soil (0010), indicative of material used to infill a hole or depression. Finds included a quantity of pottery, glass, shoe fragments, metal containers and assorted debris, none of which appeared to be of pre-19th century date. A sample selection of these were retained for further examination. The discovery of this infill material, probed down to a depth of at least 1.8m, suggests that the mill-wheel had been situated hereabouts in the field.

AREA A, Grange Farm: TRENCH 03 (Figs 1, 11, 13, Plate 2)

This trench, 3m long and 0.6m wide, was excavated to examine a distinct east-west running linear feature brought out in the geophysical survey. At a depth of about 25cm, immediately below the subsoil, there were indications of a former floor level, showing at the north end as a hardened sandy base, and at the south end as remnants of a plaster spread, beneath which was similar hardened sand. Between the two areas was the foundation trench for a former wall about 3 feet (0.9m) wide. The base of this was at 0.7m depth. Associated with this was stone rubble, a line of lumpy mortar (0013) and fragments of ceramic flue-tiles. One complete tile was rectangular in section and was ¼ inch (6-7mm) thick. Its internal cross-section was 2 x 2¾ ins (51 x 70mm) and the length 5½ ins (138mm). It was set within plaster and had probably been used to convey heat up the outer face of a wall within the former mill. Similar tiles are known from 18th century heated walled gardens.

AREA A, Grange Farm: TRENCH 04 (Figs 1, 11, 13, Plate 3)

The final trench, 1.20 x 1.75m in size, was set around some walling showing in the side of a dip. A wall 57cm thick and four courses deep was exposed and photographed. It was a roughly made wall without mortar, and appeared to be a field wall rather than a wall belonging to the former mill. No dating evidence was recovered. Its make-up suggests a wall of possible agricultural use.

AREA B, Moor Pond: TRENCH 05 (Figs 1, 14, Plates 4, 5)

Stonework leading up to and including a sluice-gate at the north-west corner of Moor Pond had been exposed in the recent past during environmental improvements associated with the erection of a timber footbridge (pers. comm. Lee Scudder). It was decided that this part of this stonework, including the exact position of the sluice-gate warranted further exposure to enable it to be recorded and measured in. A number of volunteers helped to clear turf and loose soil from above the walling and to remove soil masking two large worked stones where the sluice-gate had been positioned.

The position of the sluice-gate was marked by two large stones, one (0023) 36 inches (0.91m) long, the other (0022) 48 ins (1.22m) in length. The south ends of both stones were still in alignment. Similar stones have been seen at a lower level in the dip beneath them (pers. com. Lee Scudder), suggesting that they may have been coursed to accommodate a tall sluic-gate, or that a cascade feature may have existed. Large stone rubble (0024) had been intentionally placed behind the former gate to help manage the flow of water (Plate 5). This may have happened after the system went out of use, as one of the stones appeared to be another 36 inch long stone from the sluice-gate.

The walling leading up to the sluice-gate was both curving and lightly stepped to form a batter, and survived to 7-8 courses high on the east side (0020). A change of angle may indicate where a side-channel had come in at a high level from the north-east. The northern extent of the walling was not traced, as another spread of rubble was found obscuring its position. The west walling (0021) was not so well preserved. Although the outer facing of these walls appeared to be unmortared, any mortar had probably been leached away as the the inner corework (examined on the west side) was found to be heavily mortared.

AREA B, Moor Pond: TRENCH 06 (Figs 1, 14)

A side channel to the north-east was also examined. The stonework here was more irregular and not so well built as in the main channel in Trench 05. The north and easterly termination points of both sides of the curving walls (0026, 0027) were found, and the walls were followed to a point where two vertical iron rods were found, still apparently in situ (0028); this coincided with a change in the stonework to a more rubble-like consistency. A section in the soil behind this point indicated that there may originally have been timber boarding running from these metal rods into where this feeder channel narrowed to the main channel beyond.

CONCLUSIONS

The excavations proved to be successful. The local volunteers were enthusiastic, hard-working and responded well to instruction. All the trenches provided useful results and indicate that further work on the site by dedicated local volunteers (with continuing archaeological supervision) would be a worthwhile prospect. The willingness of the locals to continue was demonstrated at a meeting on the 28th February 2003 when the results of the excavations were presented by the author. At this meeting two main suggestions were discussed and given a positive response:

- With regard to Area A, there is a good possibility that a further programme of geophysical survey and some carefully-positioned follow-up trial-trenches could reveal the full plan of the former mill building. With further co-operation from the farmer of the land assured, it would probably be advisable to concentrate effort in this area and to deal with this one single achievable objective before looking further afield.
- The uncovering of the walls at Area B indicates that they survive reasonably well. It should be feasible (should the decision be made at official level) to expose and conserve some of the walling as a visible feature from the footbridge. This would act as both a reminder and an educational tool for helping to explain the significance and historical background of the earthworks – at a general position where they are at their most prominent. A display board and some actual stonework to view would be a good combination.

Of necessity, any further work at Papplewick should involve discussion with and the approval of the County Archaeologist, the one figure with the overall responsibility for the archaeological potential of the area.

D. REFERENCES

- Chapman, S. D. 1982. The Arkwright mills – Colquhoun’s census of 1788 and archaeological evidence. *Industrial Archaeology Review* 6(1), 5-27.
- Greatrex, N. 1986. The Robinson Enterprises at Papplewick. Part One. *Industrial Archaeology Review* 9(1), 37-56.
- Kington, J. (ed) 1988. *The Weather Journals of a Rutland Squire, Thomas Barker of Lyndon Hall*. Rutland Record Society, Oakham.
- Potter, H. R., 1964. Introduction to the history of the floods and droughts of the Trent Basin. Loughborough. Unpublished report.
- Sheppard, R. 2001. Moor Pond Wood, Papplewick. An Archaeological Desk-top Study. Trent & Peak Archaeological Unit. Unpublished report.

E. ACKNOWLEDGEMENTS

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ILLUSTRATIONS

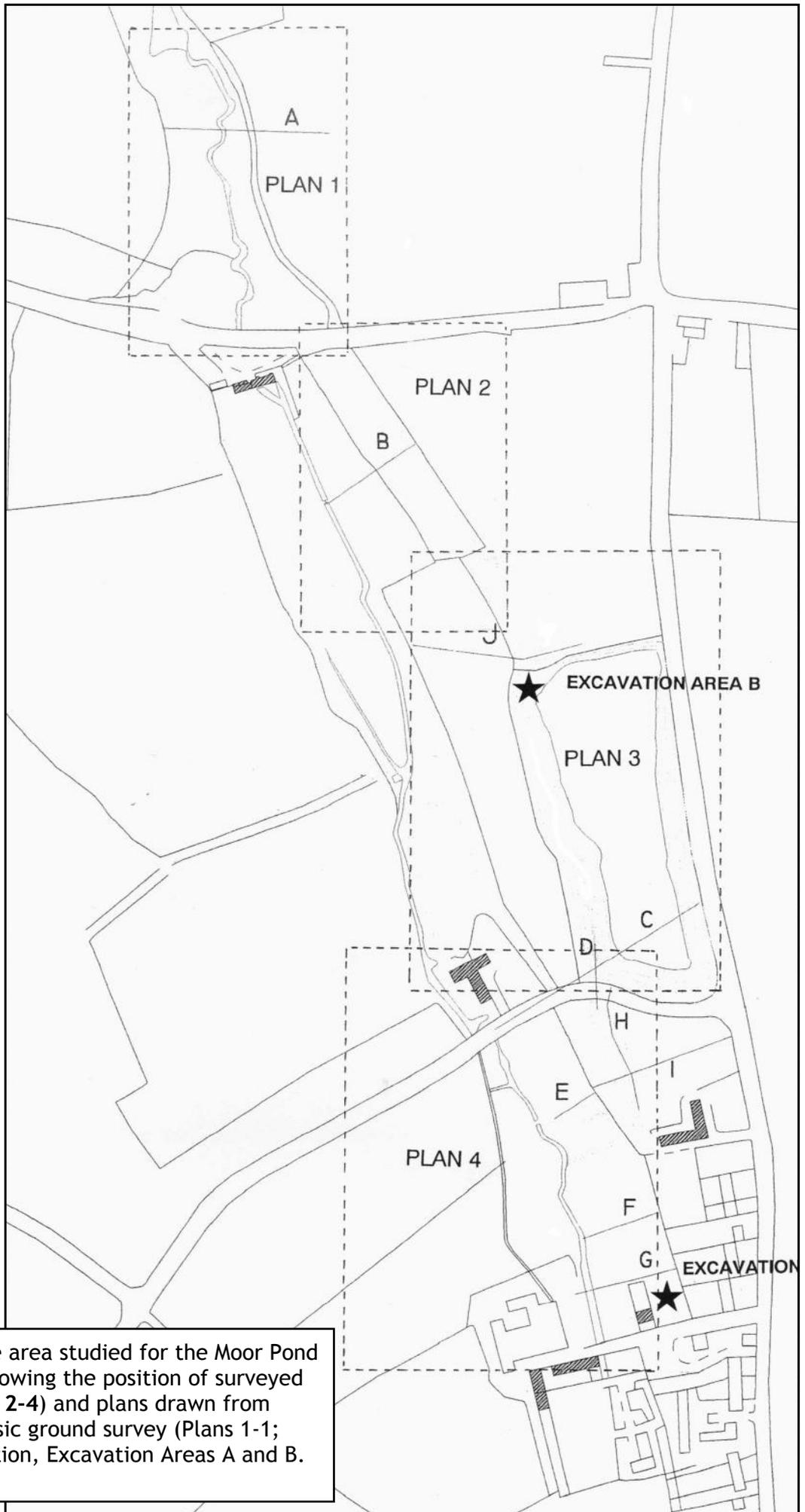


Fig. 1 Plan of the area studied for the Moor Pond Wood Project, showing the position of surveyed profiles (A-J; **Figs 2-4**) and plans drawn from electronic and basic ground survey (Plans 1-1; **Figs 5-8**). In addition, Excavation Areas A and B. Scale 1:5000.

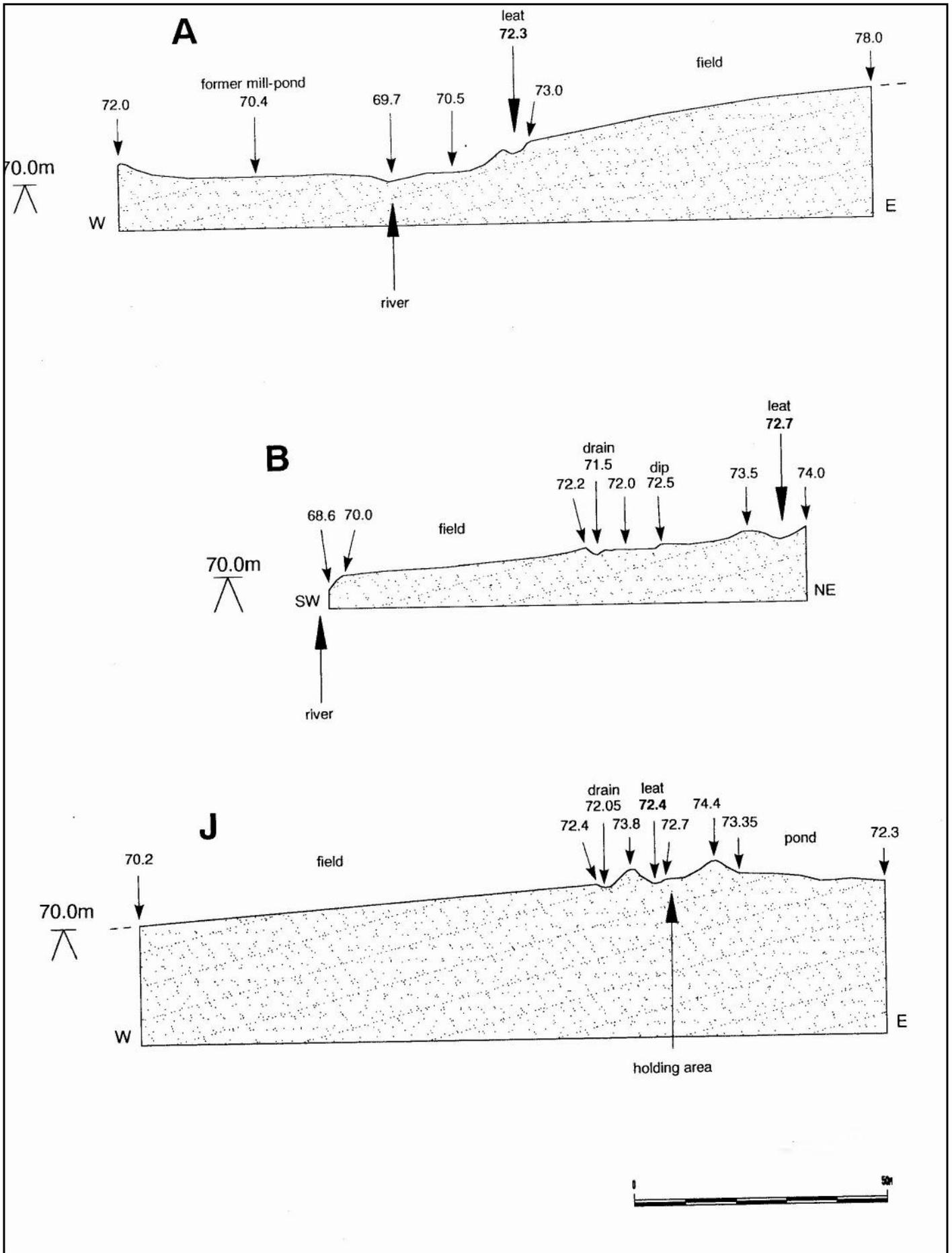


Fig. 2 Profiles A, B and J. Horizontal scale 1:1000, vertical scale exaggerated x2.

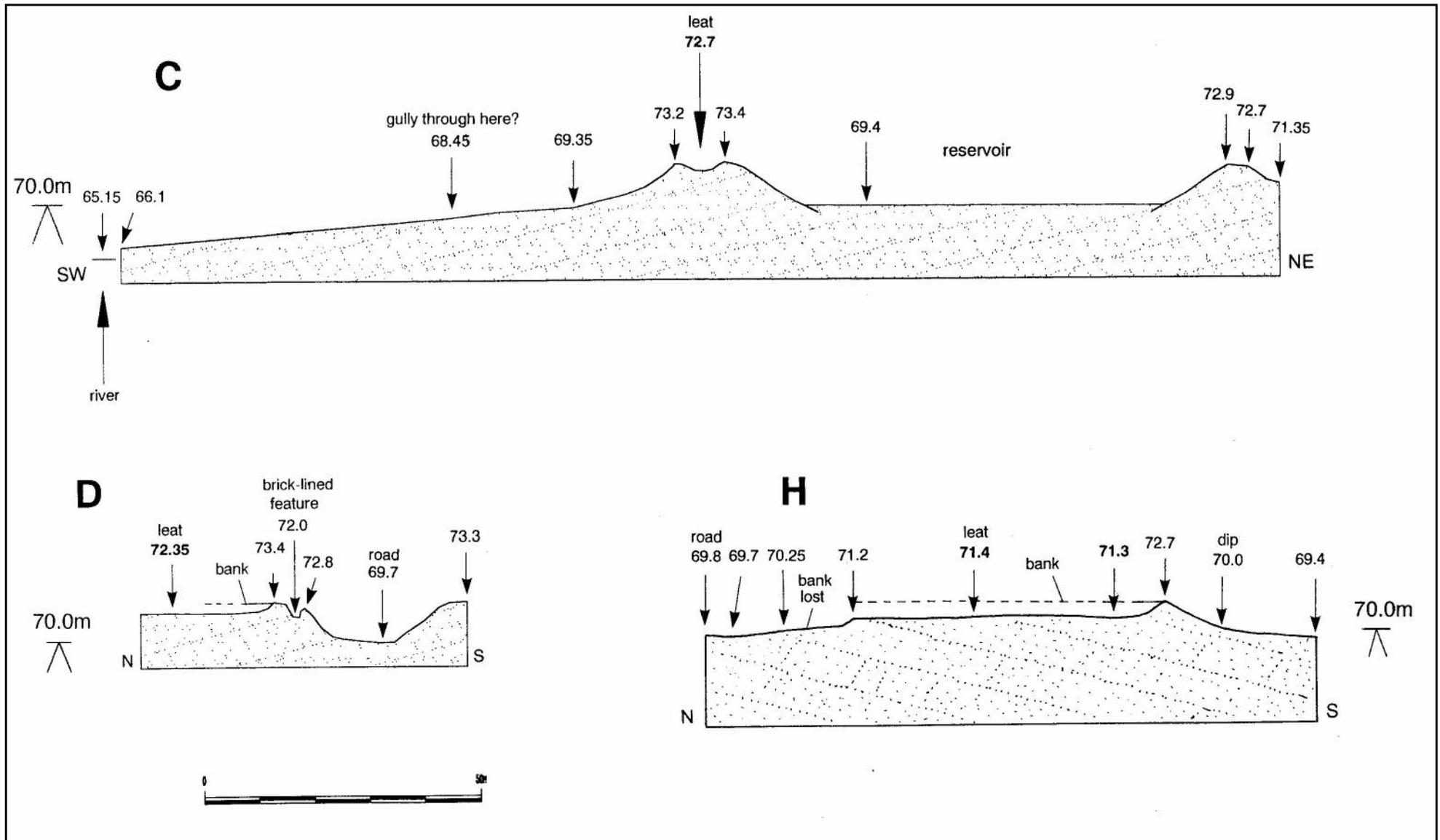


Fig. 3 Profiles C, D and H. Horizontal scale 1:1000, vertical scale exaggerated x2.

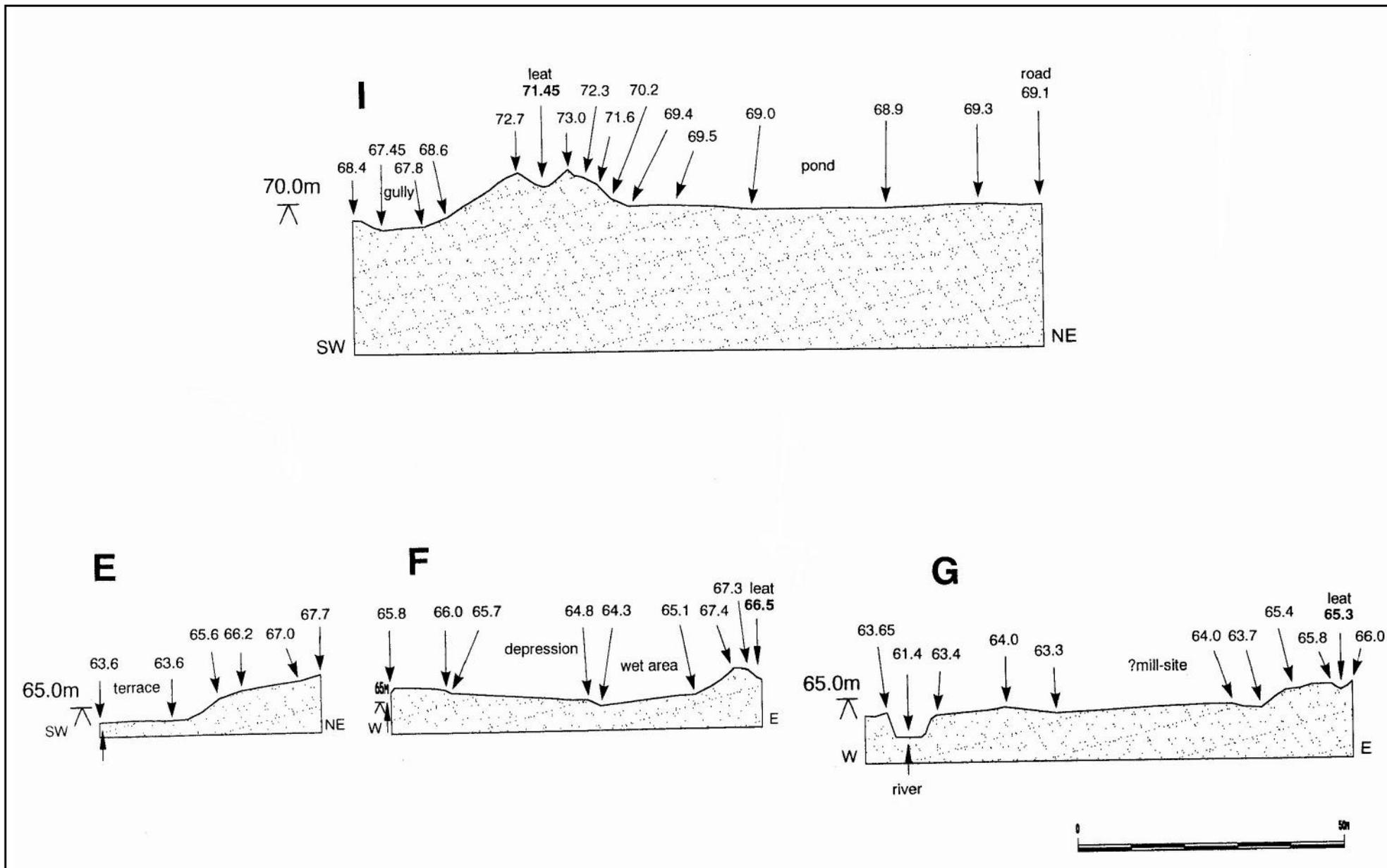


Fig. 4 Profiles E-G and I. Horizontal scale 1:1000, vertical scale exaggerated x2.

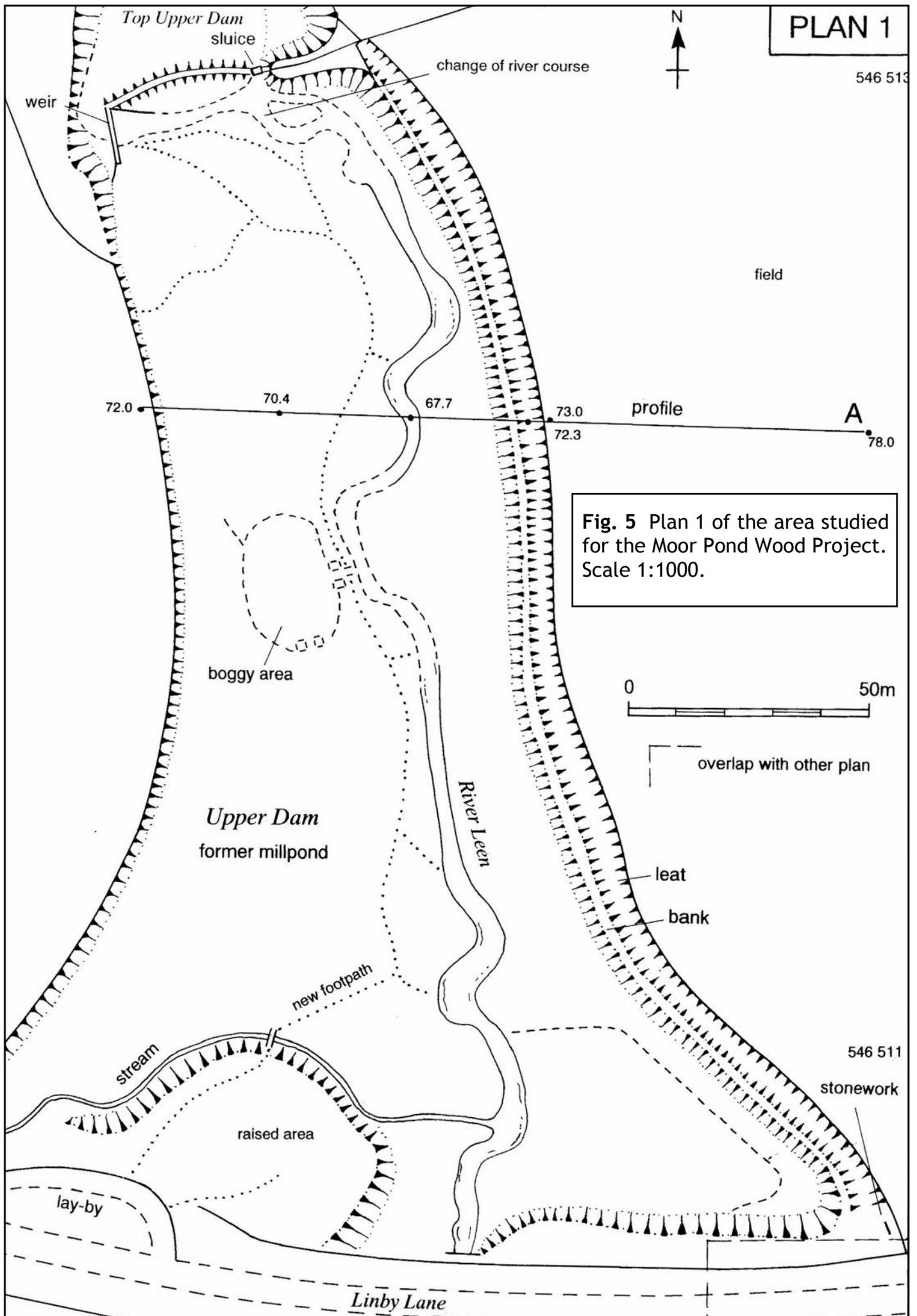


Fig. 5 Plan 1 of the area studied for the Moor Pond Wood Project. Scale 1:1000.

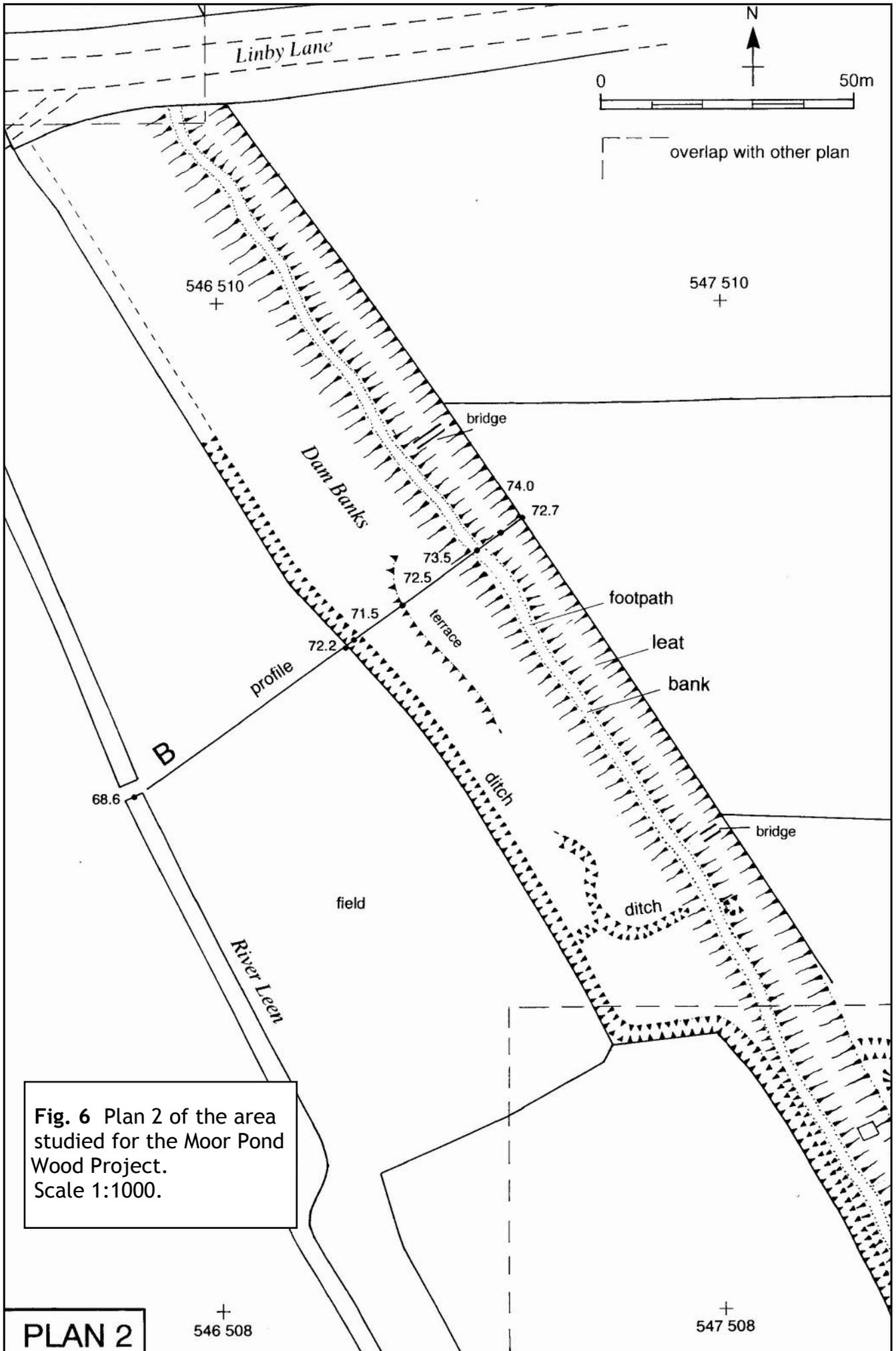
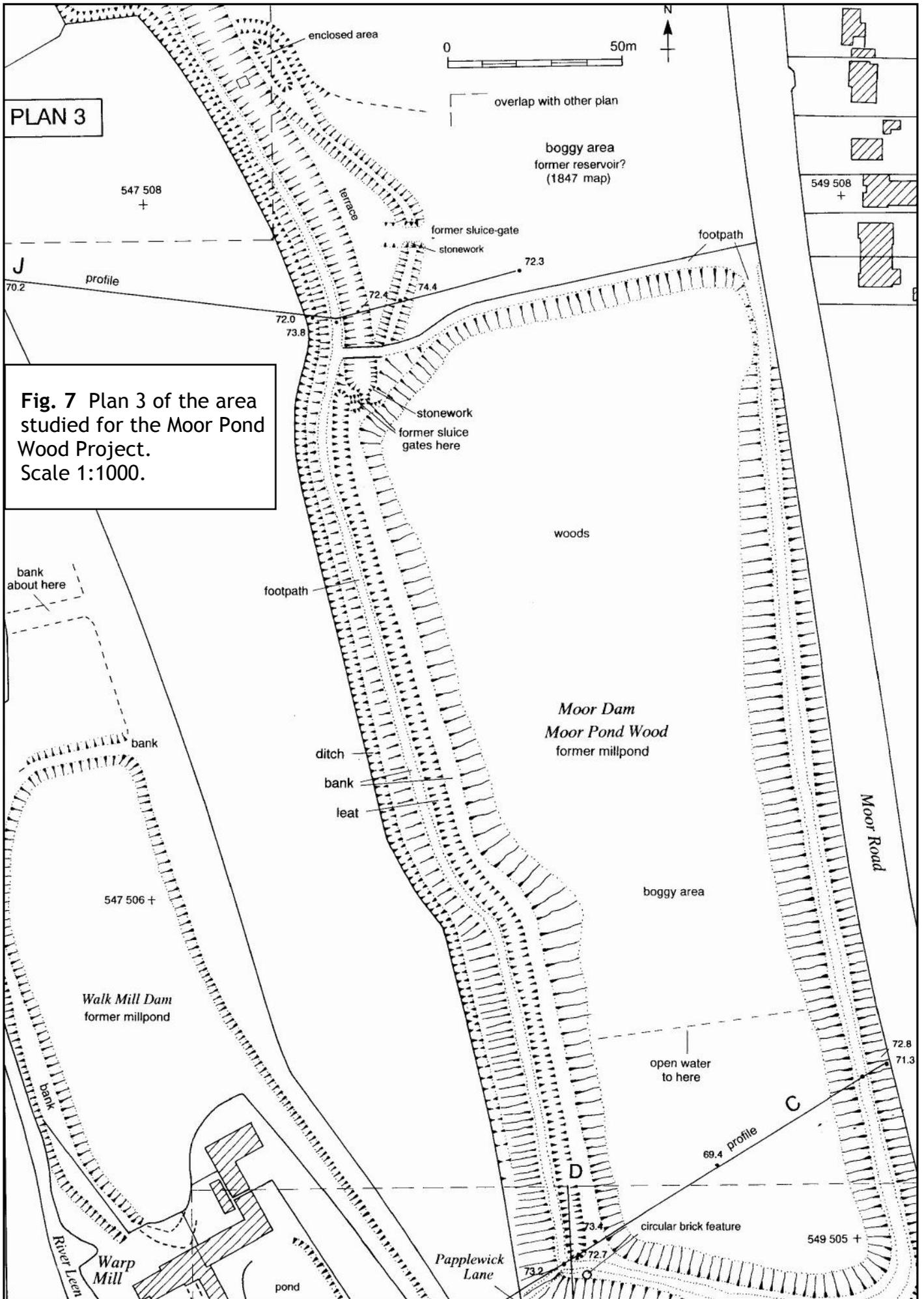


Fig. 6 Plan 2 of the area studied for the Moor Pond Wood Project. Scale 1:1000.

PLAN 2



PLAN 3

Fig. 7 Plan 3 of the area studied for the Moor Pond Wood Project. Scale 1:1000.

bank about here

bank

Walk Mill Dam
former millpond

River Leen
Warp Mill

footpath

ditch
bank
leat

Papplewick Lane

stonework
former sluice-gates here

former sluice-gate
stonework

woods

Moor Dam
Moor Pond Wood
former millpond

bogy area

open water to here

circular brick feature

Moor Road

549 505 +

549 508 +

547 508 +

profile

J

70.2

72.0

73.8

72.4

74.4

72.3

footpath

69.4

profile

C

D

73.4

72.7

73.2

72.8

71.3

0 50m

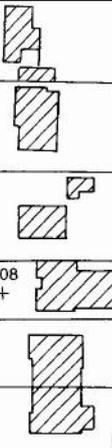
overlap with other plan

bogy area
former reservoir?
(1847 map)

N

enclosed area

terrace



pond

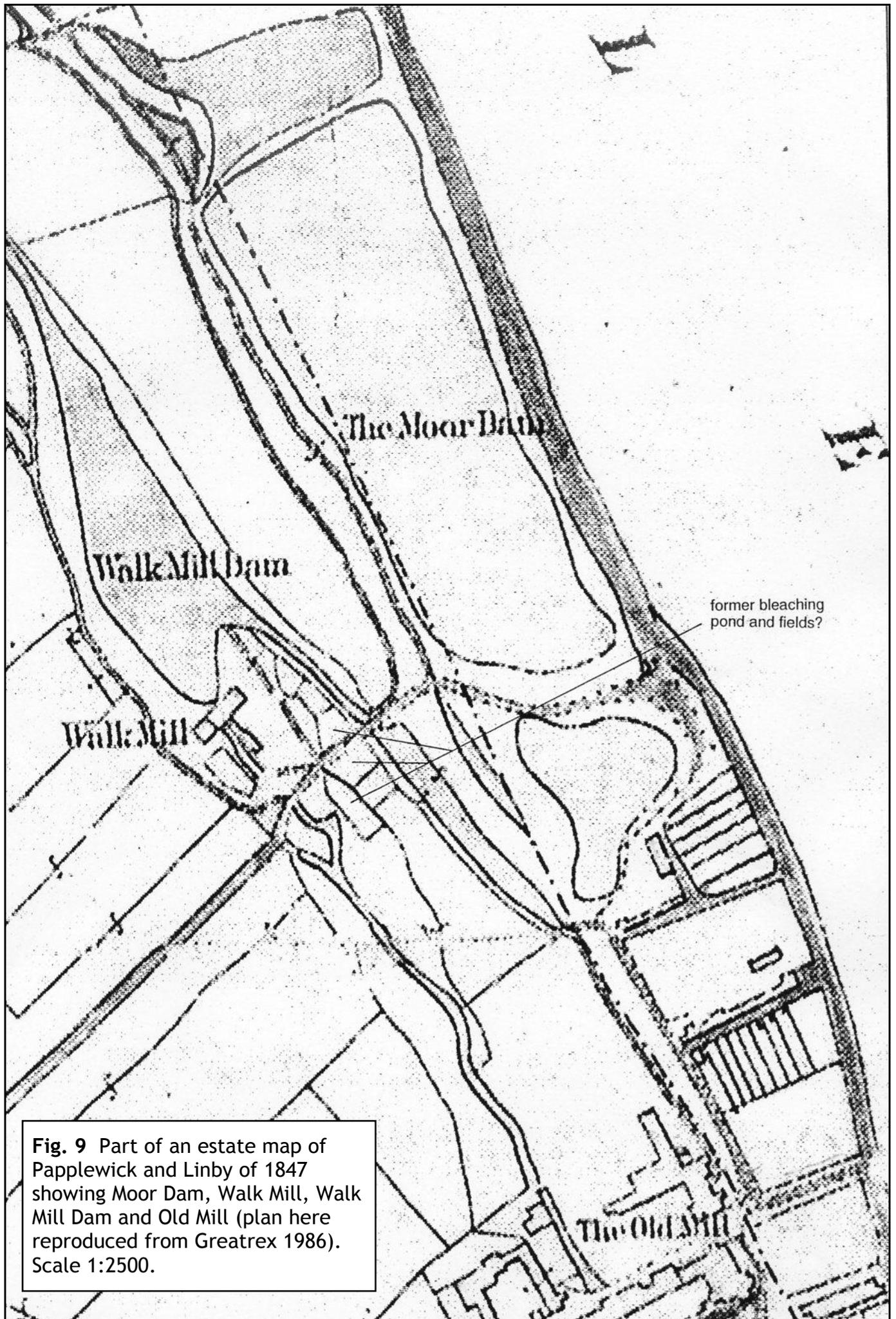


Fig. 9 Part of an estate map of Papplewick and Linby of 1847 showing Moor Dam, Walk Mill, Walk Mill Dam and Old Mill (plan here reproduced from Greatrex 1986). Scale 1:2500.

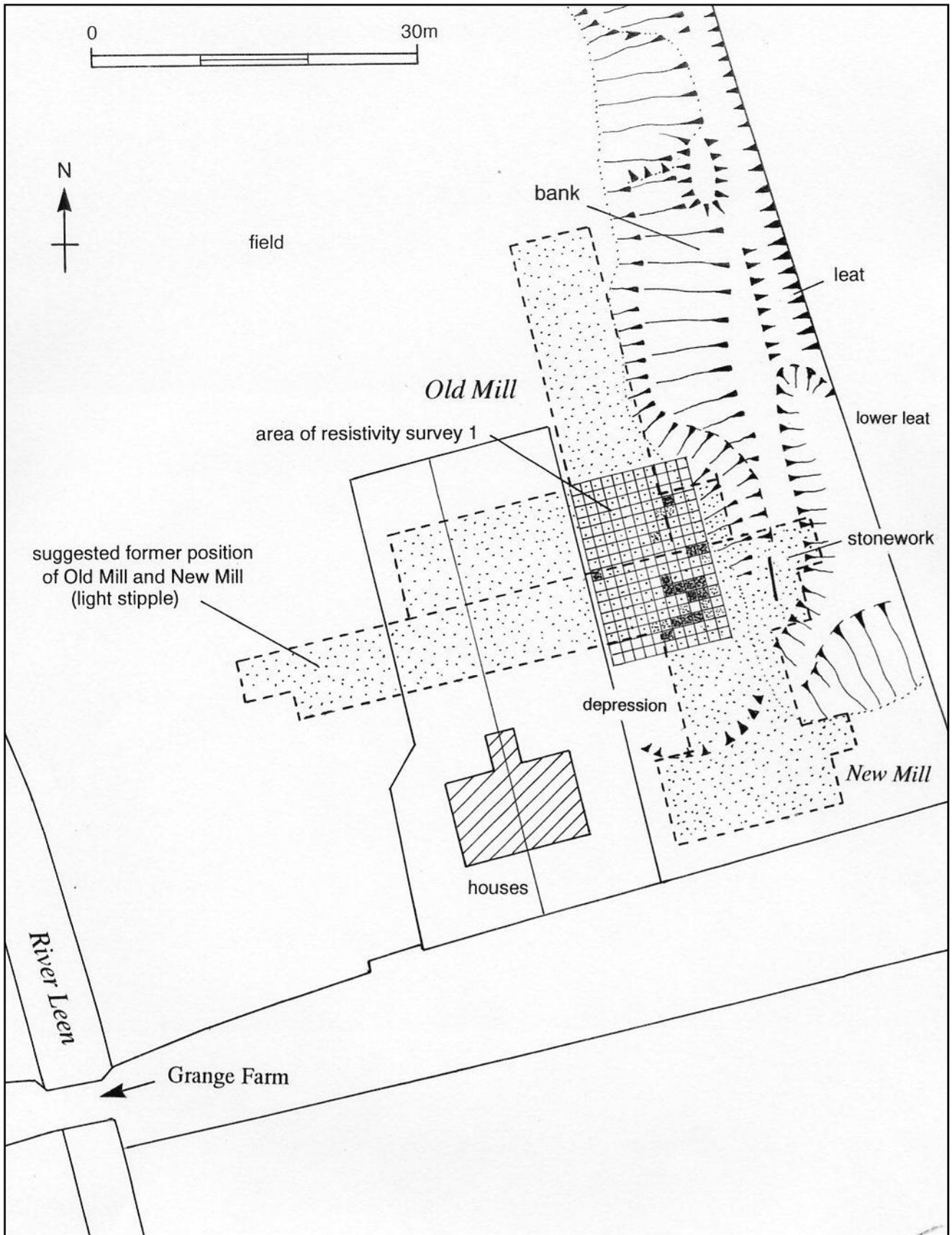


Fig. 10 Suggested position of Old and New Mills near Grange Farm (also together known as *Grange Mill*) and the results from geophysical survey 1 (13/1/02). Scale 1:500.

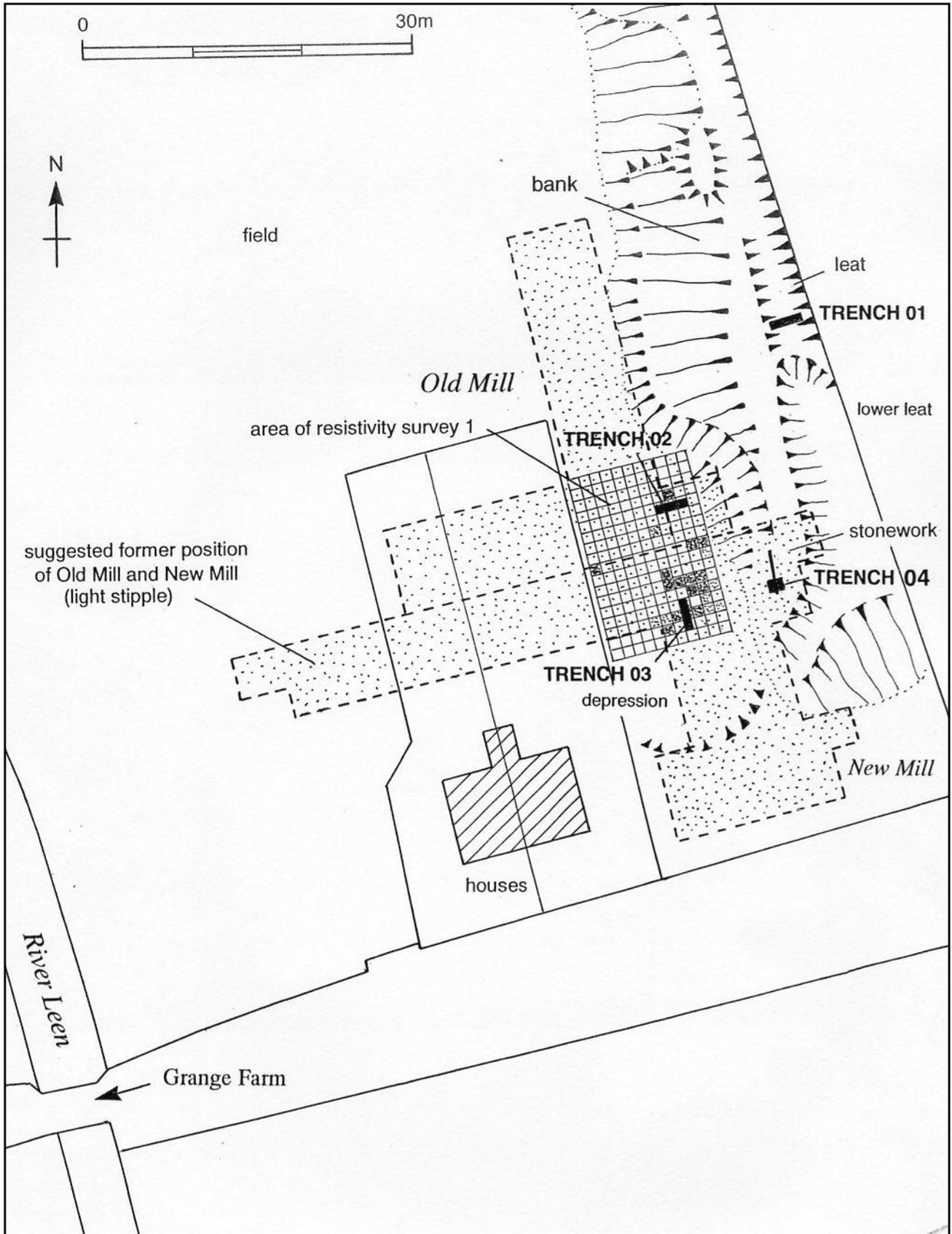


Fig. 11. Plan showing position of Trenches 01-04 excavated in Area A during October 2002. Scale 1:500.

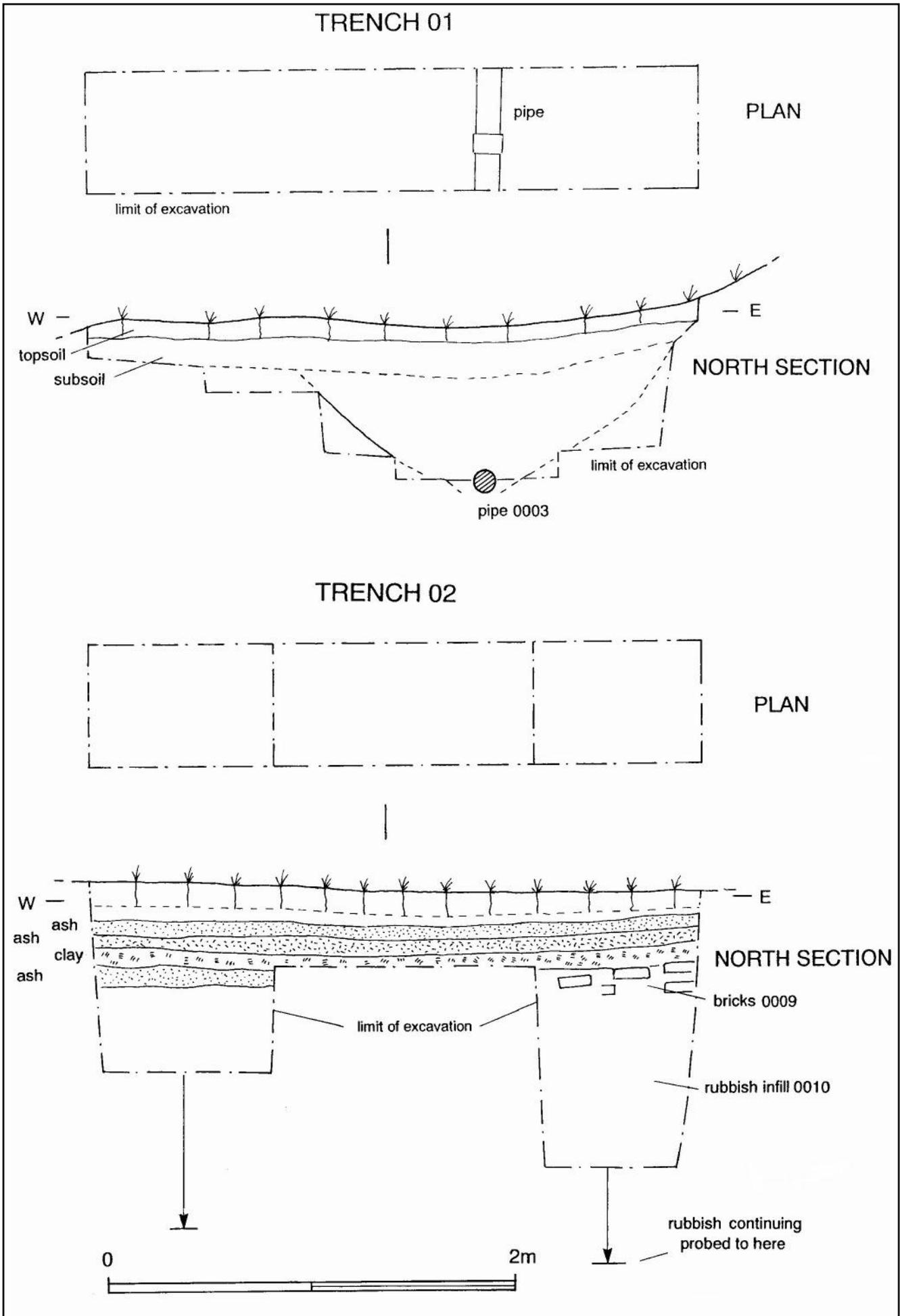


Fig. 12. Plans and sections of Trenches 01 and 02, Area A. Scale 1:25.

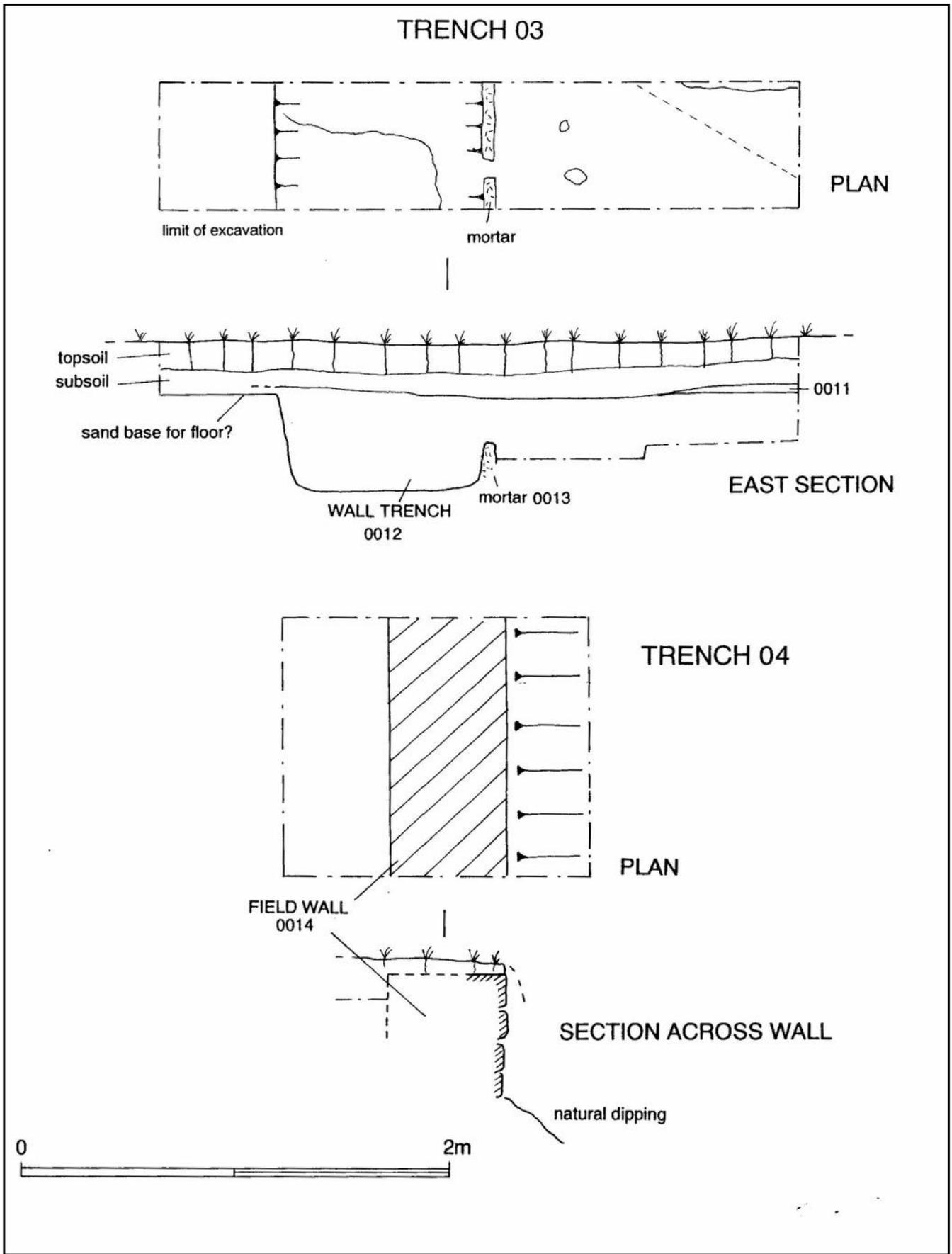


Fig. 13. Plans and sections of Trenches 03 and 04, Area A. Scale 1:25.

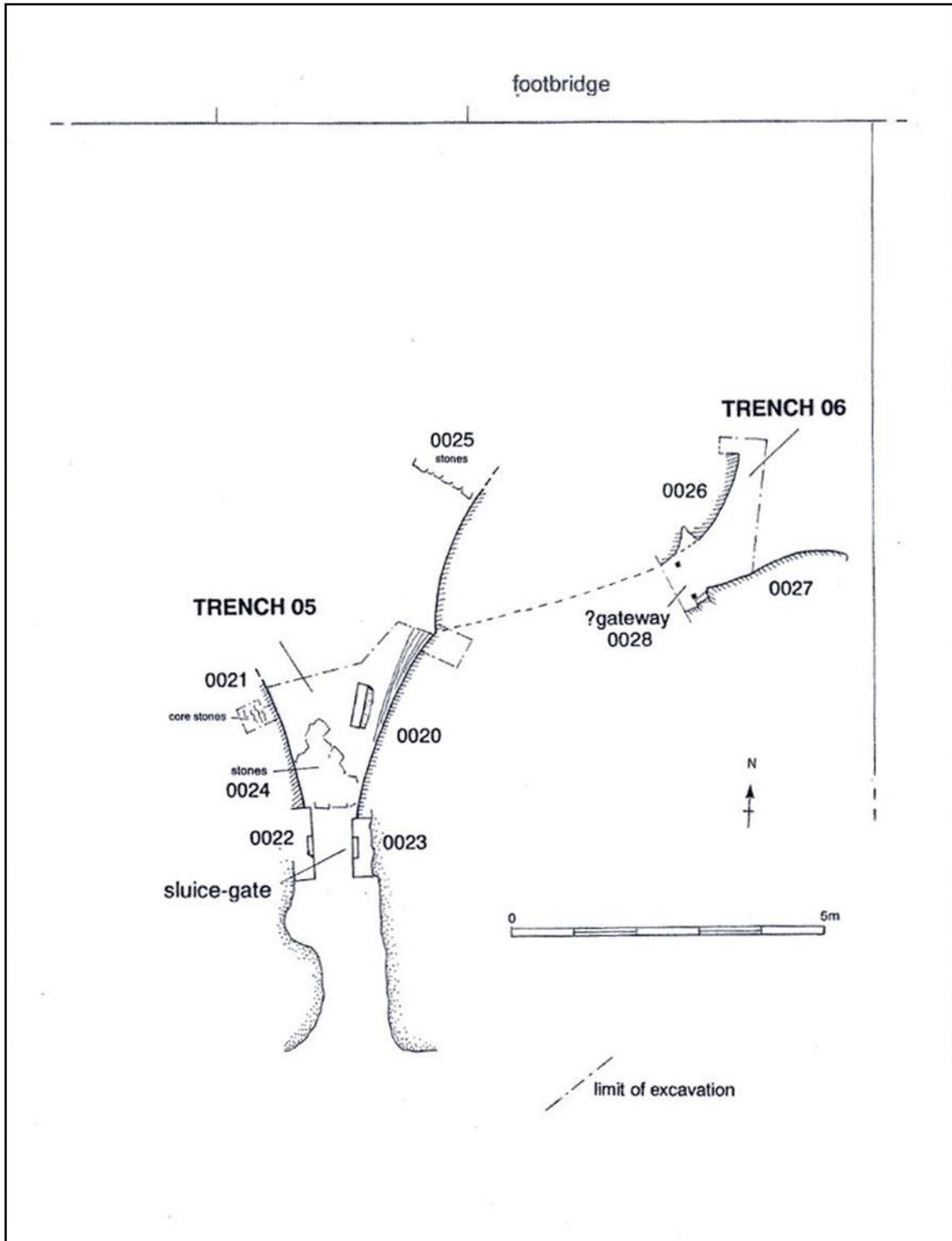


Fig. 14. Plan of Area B at the north-west corner of Moor Pond. Scale 1:100.



1



2



3

Plates. 1: Excavations by local volunteers taking place near Grange Farm, Papplewick in October 2002; 2: Stone rubble in the foundation trench 0012 uncovered in Trench 03, Area A; 3: Stone walling 0014 cleaned in Trench 04, Area B.



4



5

Plates 4 and 5: Curving stonework (0020 and 0021) leading up to where a sluice gate (stones 0022 and 0023) was once positioned at the north-west corner of Moor Pond, Papplewick (Trench 05, Area B). Exposed by volunteers in November 2002.